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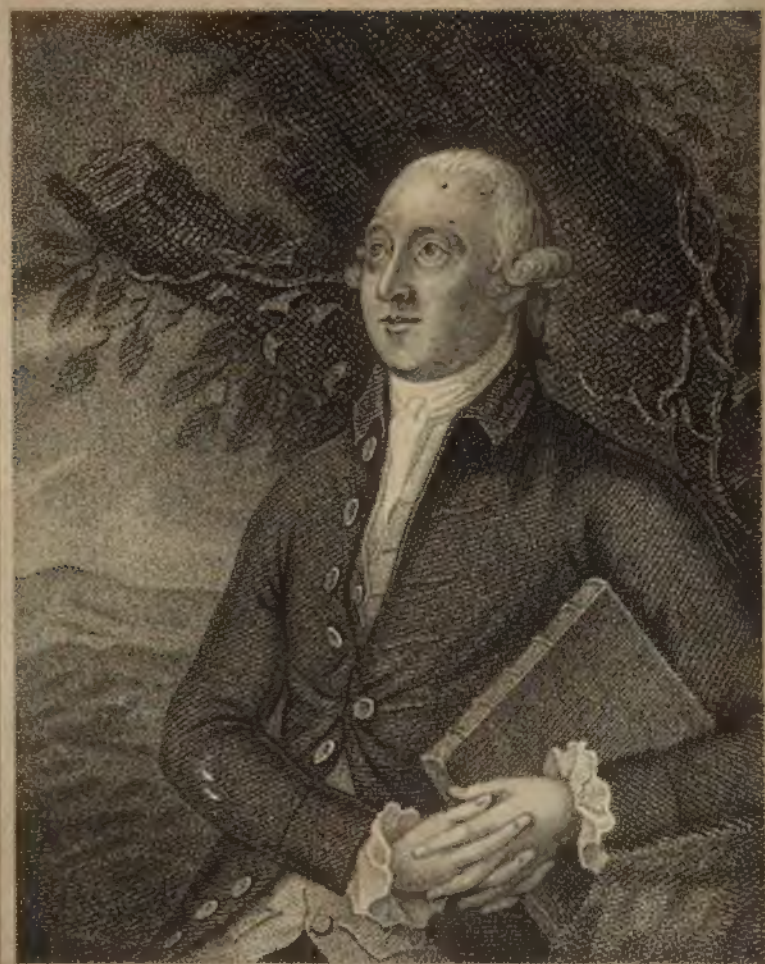


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Thos Pennant orough print 1776

Engraved by J. Byrne



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W. Dodder.

BRITISH ZOOLOGY.

CLASS I.

Quadrupeds.

CLASS II.

Birds.

DIVISION I. *LAND.*

BY THOMAS PENNANT, ESQ.

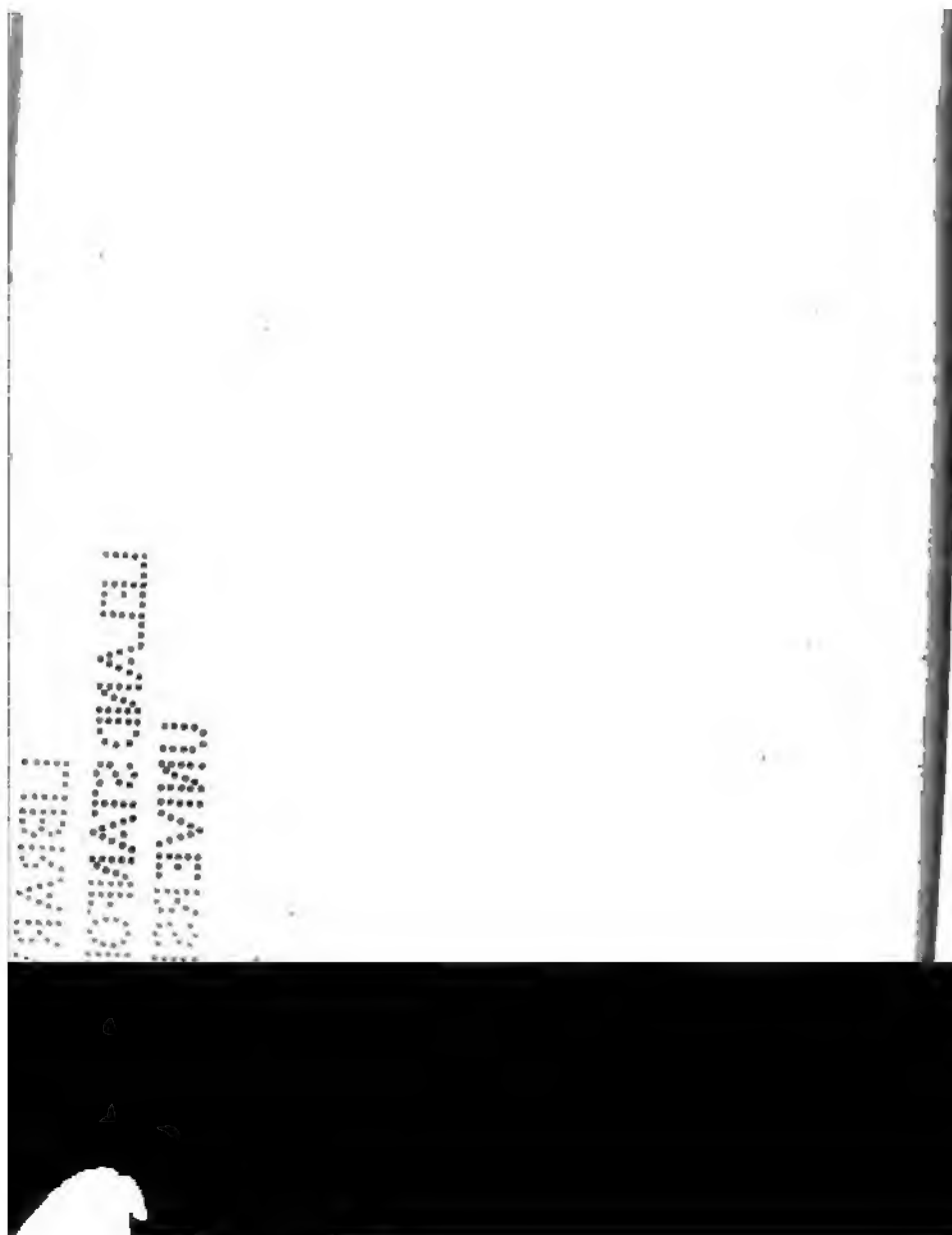
VOL. I.

DUBLIN :

PRINTED BY J. CHRISTIE, 170, JAMES'S-STREET.

1818.

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TO THE
DUTCHESS DOWAGER
OF
Portland,

THIS WORK IS DEDICATED,
AS A GRATEFUL ACKNOWLEDGEMENT
OF THE MANY FAVORS
CONFERRED BY HER GRACE
ON HER MOST OBLIGED,
AND MOST OBEDIENT
HUMBLE SERVANT,

THOMAS PENNANT.

Downing,
March 1, 1777.

79653




Preface.

AT a time, when the study of natural history seems to revive in *Europe*; and the pens of several illustrious foreigners have been employed in enumerating the productions of their respective countries, we are unwilling that our own island should remain insensible to its particular advantages; we are desirous of diverting the astonishment of our countrymen at the gifts of nature bestowed on other kingdoms, to a contemplation of those with which (at least with equal bounty) she has enriched our own.

A judicious Foreigner has well remarked, that an *Englishman* is excusable should he be ignorant of the papal history, where it does not relate to *Great Britain*; but inex-

cusable should he neglect inquiries into the origin of parlements, the limitation of the royal prerogative, and the gradual deviation from the feudal to the present system of government.

The observation is certainly just, and the application appears too obvious to be pointed out; yet the generality of mankind can rest contented with ignorance of their native soil, while a passion for novelty attracts them to a superficial examination of the wonders of *Mexico*, or *Japan*; but these should be told, that such a passion is a sure criterion of a weak judgement: utility, truth, and certainty, should alone be the point at which science



But these, and many other arguments for examining into the productions of our own island, may here be waved, as the admirable LINNÆUS has displayed them at large in an oration,* which for masterly reasoning, and happy ingenuity, may vie with the best compositions.

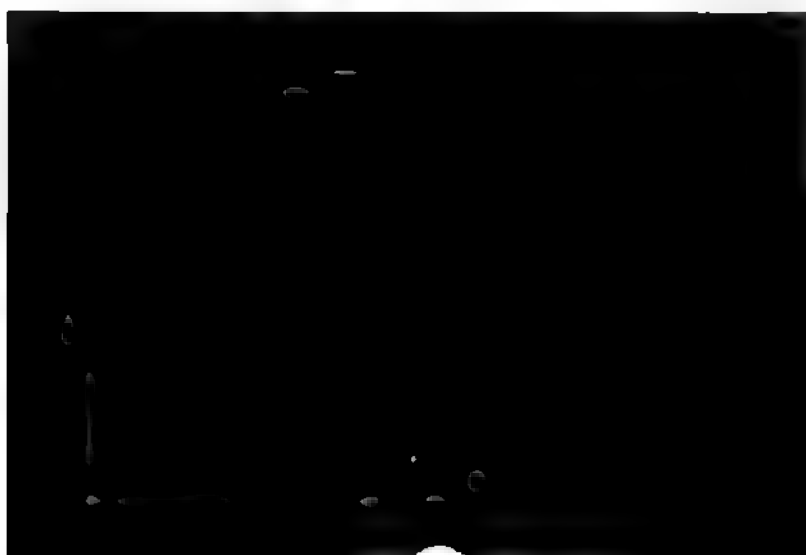
Yet, as that great naturalist has, in the same tract, published an eulogium on *Sweden*; and as an incitement to his countrymen to apply themselves to the study of nature, enumerated the natural productions of that kingdom; we shall here attempt a parallel, and point out to the *British* reader, his native riches; many of which were probably unknown to him, or perhaps slightly regarded.

Do the heights of *Torsburg*, or *Swucku*, afford more instruction to the naturalist than the mountains of *Cumberland*, or *Caernarvonshire*? whose sides are covered with a rich

* *Amæn. Acad.* Tom. II. p. 409. *Stillingfleet's Swedish Tracts*, Tr. 1.

variety of uncommon vegetables, while their bowels are replete with the most useful minerals. The *Derbyshire* hills, abounding in all the magnificence of caves and cliffs; the mountains of *Kerry*, and that surprizing harbour the *Bullers of Buchan*,* may well be opposed to the rocks of *Blackulla*, or the caverns of *Skiula*. *Sweden* can no where produce a parallel to that happy combination of grandeur and beauty in *Keswick* vale,† or *Killarny*‡ lake; nor can *Europe* shew a natural wonder equal to the *Giant's Causeway* in the north of *Ireland*.

The excellence and number of our springs (whether medicinal or incrusting) are well



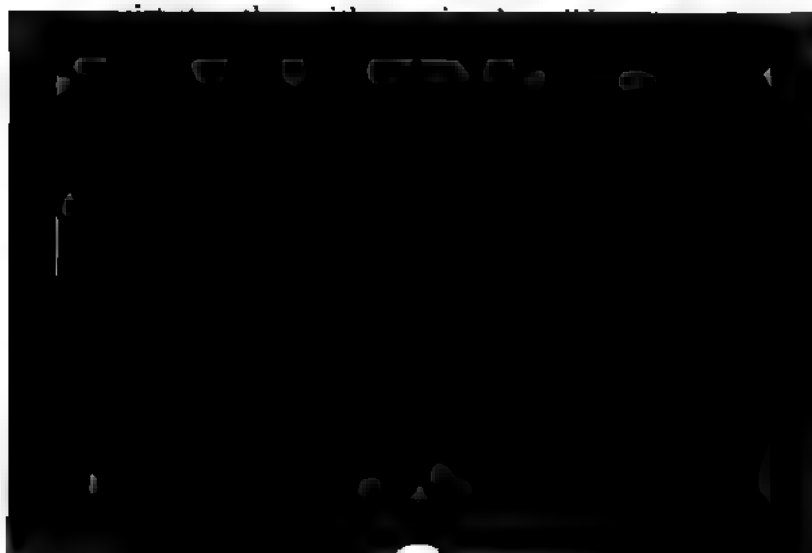
shew that it is found in this island;* but silver is found in great abundance in our lead ores, and veins of native silver in the copper ore of *Muckrus*, on the lake of *Kil-larny*. The hæmatites iron ores of *Cumberland*, and the beautiful columnar iron ores of the forest of *Dean*, are sufficient to display our riches in that useful commodity. No country produces so great a quantity of tin as *Cornwall*; and that county, and several others in the north, have been long noted for their inexhaustible veins of copper: nor less famous are the lead mines of *Derbyshire*, *Cardigan-shire* and *Flintshire*, which have been worked for ages, yet shew no sign of the decline of their stores.

* That our country produces gold, appears in Dr. *Borlase's History of Cornwall*, p. 214. So late as the year 1753, several pieces were found in what the miners call *stream tin*; one specimen was as thick as a goose quill; others weighed to the value of seventeen shillings, twenty-seven shillings, and another even to the value of three guineas.

In all these, nature sports with great luxury; the crystallized lead ore of *Tralee*,* the fibrous lead ore of *Tipperary*; the laminated lead ore of *Lord Hoptoun's* mines; the crystallized tins, and the figured ores of *Zink*, are equally noted for their elegance, scarcity, and richness.

The ore of *Zink*, or *Lapis Calaminaris*, is found in vast quantities in the counties of *Somerset* and *Flint*; while black lead or wadd, a substance scarce known in other kingdoms, abounds in the mountains of *Cumberland*.

To the *Swedish Petroleum*, we may oppose the Well at *Pitchford*, and that of *St. Catherine's* near *Edinburgh*. Our amber and our



only mention our wonderful mines of rock salt; our allum and our vitriol works; our various marbles, alabasters, and stones; our most excellent clays and earths;* all which articles, and many more unnoted here, might have furnished us with an ample field for panegyric.


Our botanical productions are not less abundant; but the works of *Ray*, which have lately been much enlarged and methodized, according to the *Linnæan* system, by the ingenious Mr. *Hudson*, in his *Flora Anglica*, are a sufficient display of our vegetable riches.

Our Zoology would be a copious subject to enlarge on, but the work in hand restrains us from anticipating our reader's curiosity. We might expatiate on the clouds of *Soland* geese which breed on the *Bass island*, or

* If the inquisitive reader is desirous of a farther account of the number and excellence of our subterraneous productions, we refer him to the learned Dr. *Woodward's Catalogue of the English Fossils*, London 1729, particularly to p. 5.

Puffins on that of *Priestholme*: on our fish, and other marine animals; on our insects, and the various other sensitive productions of this kingdom; but we forbear a parade of useless declamation, and shall only add, that as few countries receive more advantages from their natural breed of quadrupeds, unmixed with any beast that preys on man, so, few can boast a greater variety of birds, whether local, or migratory.

This is a general view of the natural history of our own country; why then should we neglect inquiring into the various benefits that result from these instances of the wisdom of our Creator, which his divine munificence has so liberally, and so immediately



“ eye, especially to have them slighted or
 “ contemned; but to be admired by the ra-
 “ tional part of the world, to magnify his
 “ own power to all the world, and the ages
 “ thereof; and since the works of the crea-
 “ tion are all of them so many demonstra-
 “ tions of the infinite wisdom and power of
 “ God, they may serve to us, as so many
 “ arguments exciting us to a constant fear
 “ of the Deity, and a steady and hearty
 “ obedience to all his laws.”*

Much might be added to this subject, if considered in a theological light; but since the writings of *Boyle*, *Ray*, and *Derham*, fully prove that the study of natural history enforces the theory of religion and practice of morality, we had better refer to their works in general, than mangle them by imperfect quotations.

To exalt our veneration towards the Al-

* *Derham's Phys. Theol.* Book XI. c. 24.

mighty, is the principal end of this sublime science; and next to that, the various benefits resulting from it to human society deserve our serious consideration.

To give an obvious instance: what wonderful changes have been made in human affairs by the discovery of an obscure mineral. The antients, ignorant of the application of the magnet, timidly attempted a mere coasting navigation; while we, better informed of the uses of it, traverse the widest oceans, and by the discovery of the new world, have layed open to science, an inexhaustible fund of matter.

The rise and progress of medicine, kept



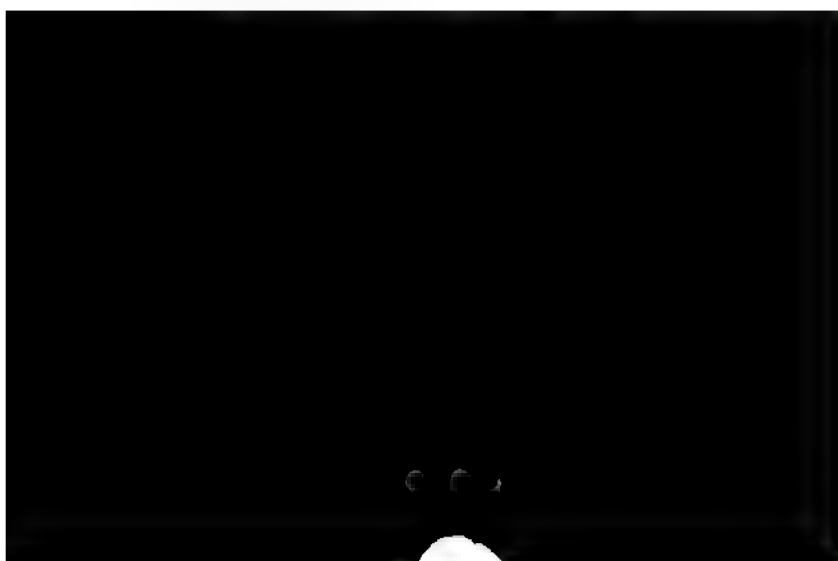
lege; but we shall only give some of its uses in the polite arts, which have hitherto been too little connected with it.

To instance particularly in painting, its uses are very extensive: the permanency of colors depends on the goodness of the pigments; but the various animal, vegetable, and fossil substances (out of which they are made), can only be known by repeated trials; yet the greatest artists have failed in this respect: the shadows of the divine *Raphael* have acquired an uniform blackness, which obscures the finest productions of his pencil, while the paintings of *Holbein*, *Durer*, and the *Venetian-school* (who were admirably skilled in the knowlege of pigments), still exist in their primitive freshness.

But these advantages are small, compared to those derived from the knowlege of nature in the representation of objects: painting is an imitation of nature; now, who can imitate without consulting the original? But to

come to what is more particularly the object of our inquiries; animal and vegetable life are the essence of landscape, and often are secondary objects in historical paintings: even the sculptor in his limited province would do well to acquire a correctness of design with a perfect knowledge of the muscles of animals. But the painter should have all this and more; he should be acquainted with all their various tints, their manner of living, their peculiar motions or attitudes, and their places of abode,* or he will fall into manifest errors.

*Plurimus inde labor tabulas imitando juvabit
Egregias, operumque typos, sed plura docebit*



*Natura ante oculos præsens, nam firmat et auget
Vim genii, ex illâque artem experientia complet.**

Descriptive poetry is still more indebted to natural knowlege, than either painting or sculpture: the poet has the whole creation for his range; nor can his art exist without borrowing metaphors, allusions, or descriptions, from the face of nature, which is the only fund of great ideas. The depths of the seas, the internal caverns of the earth, and the planetary system, are out of the painter's reach; but can supply the poet with the sublimest conceptions: nor is the knowlege of animals and vegetables less requisite, while his creative pen adds life and motion to every object.

From hence it may be easily inferred, that an acquaintance with the works of nature is equally necessary to form a genuine and correct taste for any of the above-mentioned arts. Taste is no more than a quick sensi-

* *Fresnoy de arte graph. lîn. 537.*

bility of imagination refined by judgement, and corrected by experience; but experience is another term for knowledge: and to judge of natural images, we must acquire the same knowledge, and by the same means, as the painter, the poet, or the sculptor.

Thus far natural history in general seems connected with the polite arts; but were we to descend into all its particular uses in common life, we should exceed the bounds of a preface: it will be therefore necessary to confine our inquiries to the investigation of a single part of the material world, which few are so ignorant as not to know is divided into the animal, vegetable, and fossil king-

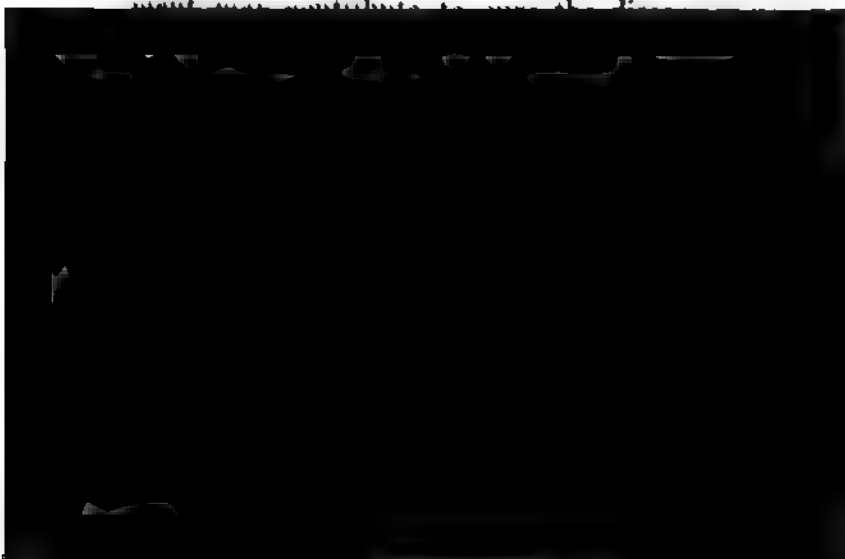
our views the immense tracts of natural knowlege, and we shall find it an arduous task only to investigate a single province, so as to speak with precision and certainty; without which there can be no real improvements in natural history.

For these reasons, a partial examination of this science is all that a considerate mind will aim at, which may perhaps be most naturally guided to give the preference to the most exalted subject of it.

Zoology is the noblest part of natural history, as it comprehends all sensitive beings, from reasoning man, through every species of animal life, till it descends to that point where sense is wholly extinct, and vegetation commences: and certainly none will deny, that life, and voluntary motion, are superior to a mere vegetating principle, or the more inactive state of the fossil kingdom.

Should we follow the train of reflections

which naturally arise from the contemplation of animals, they would swell this preface into a volume: and should we only mention the various uses of *British* animals in common life, yet even these would greatly exceed the bounds to which we have thought it right to limit ourselves. The knowledge of *Dietetics* is a necessary branch of medicine, as by a proper attention to that article, an obstinate distemper may be eradicated, when common remedies have failed; but this can never be attained, without the study of Zoology, which assists us greatly in learning the different qualities of animal food; and how far a difference of nutri-




portant branches of commerce; yet these may be enlarged, by discovering new properties in animals, or by the farther cultivation of those already discovered. The science of Zoology is requisite for each of these; and if we reflect but a little on the unwearied diligence of our rivals the *French*, we should attend to every sister science that may any ways preserve our superiority in manufactures and commerce.

Domestic œconomy is an object of equal consequence; and the author* of the *Calendar of Flora* has established the uses of Zoology in this particular, with undeniable evidence. This excellent writer has united a happy invention, with the most solid judgement, and certainly merits the highest commendations, as a friend of human kind. Our ingenious countryman, and worthy friend, the late Mr. *Stillingfleet*, in the same year pursued almost the same plan as far as his

* *Alex. Mal. Berger.*

time would permit, with equal success, and manifestly proved the utility of the project, in a learned discourse prefixed to his work.*

If then Zoology can suggest so many hints towards enlarging and improving our manufactures and agriculture; we shall not think our time misapplied, in offering to the public, the NATURAL HISTORY of the *Quadrupeds* and *Birds* of GREAT BRITAIN. This compilation had its peculiar difficulties; but the labor of travelling through a dry arrangement of the subject, was very frequently alleviated by the beautiful specimens we met with in our progress: besides, we own with pleasure that we have been greatly aided by



dered the work more complete, but are also encouraged to trace the *British Zoology* through some of the remaining classes.

Let therefore every merit that may appear in the present edition, and every error that may have been suppressed from the former, be attributed to the kind informations we have received from our learned and ingenious friends; among whom we are ambitious of naming the Honorable *Daines Barrington*; the Reverend Sir **John Cullum*, Baronet; the Reverend **George Ashby*, and the Reverend Mr. **Green* of Cambridge; **William Constable*, Esquire; Sir *Joseph Banks*, Baronet, and K. B. **Benjamin Stillingfleet*, Esquire; **Thomas Falconer*, Esquire, of *Chester*; Doctor *John Reinold Forster*; the Reverend Doctor **Buckworth*; the Reverend *Hugh Davies*, of *Beaumaris*; Mr. **Travis*, Surgeon, of *Scarborough*; Mr. *Latham*, Surgeon, of *Dartford*; **Thomas Tofield*, of *Yorkshire*, Esquire; Mr. **Plymly*, of *Longnor*, *Shrop-*

shire; **Owen Holland*, Esquire, of *Conwy*;
**Henry Symes*, Esquire, of *Hanford, Wilts*;
Doctor *Lycous*, of *Gloucester*; Doctor **Solander*;
Mr. **Peter Collinson*; the Reverend
**Gilbert White*, of *Selborne, Hants*; and that
Father of *British Ornithologists*, Mr. **George*
Edwards, of the *College of Physicians*.†

I unaccountably omitted the name of
Marmaduke Tunstall, Esquire, of *Wycliff*, in
Yorkshire, which I must now add to the said
list; the excellency of his moral character,
his uncommon liberality, and his deep skill
and zeal in the study of natural history,
made him less most sincerely lamented by
all who had the happiness of his acquain-


and my *British Zoology*, the honor of bestowing much time in illustrating them with notes. These his relative, *Edward Constable*, of *Burton Constable*, has, with great liberality, intrusted me with. The following pages will receive from them the utmost improvement. At the time I acknowledge the favor, I feelingly regret the loss of our common friend.||

In the prosecution of our plan, we shall, to avoid the perplexity arising from forming a new system, adopt (as far as relates to the *Quadrupeds* and *Birds*) that of the inestimable *Ray*, who advanced the study of nature far beyond all that went before him; and whose abilities, integrity, and mildness, were no less an ornament to the human species in general, than to his own country in particular. Yet, as this excellent man was

|| The illustrations and improvements of this gentleman, are marked with M. T. the initials of his name.—
Ed.

in a manner the founder of systematic Zoology, so later discoveries have made a few improvements on his labors: wherever, then, he is mistaken in the arrangement, we shall attempt a reform, assisted by the more modern systems, all of which owe their rise to the plan chalked out by our illustrious countryman. It is unnecessary to detain the reader in this place with the reasons for our deviation from the order we observed in our last edition, for they are given at large in the Prefaces to our *Synopsis* and *History of Quadrupeds* and *Genera of Birds*.

We have, in our descriptions, wholly omitted the anatomy of animals; as that part,



in which those authors have placed the animal. The names shall be given in several *European* languages;* and we shall conclude with a brief, but sufficient description, adding, at the same time, the various uses, and natural history, of each individual.

If this plan succeeds, in promoting the knowlege of nature in this kingdom, we shall think ourselves amply rewarded. Could our exhortations avail, we should recommend this study most earnestly to every country gentleman. To those of an active turn, we might say, that so pleasing and useful an employment would relieve the *tædium* arising from a sameness of diversions; every object

* In the ornithology the *European* names are prefixed to the author referred to in the synonyms,

<i>Italian</i>	to	Aldrovand, Olina, or Zinanni.
<i>French</i>		Brisson, or de Buffon.
<i>German</i>		Gesner, or Kramer.
<i>Swedish</i>		the Fauna Suecica.
<i>Danish and Norwegian</i>		Brunnich.
<i>Carniolan</i>		Scopoli.

would produce some new observation, and while they might seem only to gratify themselves with a present indulgence, they would be laying up a fund of useful knowledge; they would find their ideas sensibly enlarged, till they comprehended the whole of domestic economy, and the wise order of Providence.

To those of a sedentary disposition, this study would not only prove agreeable, but salutary: men of that turn of mind are with difficulty drawn from their books, to partake of the necessary enjoyments of air and exercise; and even when thus compelled, they profit less by it than men of



scene, they will be ready to exclaim with the poet:

On every thorn, delightful wisdom grows;

In every rill, a sweet instruction flows. **YOUNG.**

Thus would the contemplative naturalist learn from all he saw, to love his Creator for his goodness; to repose an implicit confidence in his wisdom; and to revere his awful omnipotence. We shall dwell no longer on this subject, than to draw this important conclusion; that health of body, and a chearful contentment of mind, are the general effects of these amusements. The latter is produced by a serious and pleasing investigation of the bounties of an all-wise and beneficent Providence; as constant and regular exercise is the best preservative of the former.

THOMAS PENNANT.

Downing,
March 1, 1776.

TO our Author's brief and brilliant display of the mineral riches of these islands, in page xi. &c. it may be added, that gold has been found in greater abundance in Ireland than in any of the British isles.

From the gold mines of *Croaghau mountain*, in the county of *Wicklow*, which were worked by order, and at the expence of government, there were raised, from the 12th of August, 1796, to the 24th of June, 1801, 599 oz. 7 dwt. 8½ grs. of gold: the weight of ingots of gold and of native gold, sold in the same period, was, of ingots, 540 oz. 17 dwt. 21 grs., of native gold, 17 oz. 16 dwt. 7 grs.; the value of ingots sold was £2188 5s. 7½ d., of native gold £71 4s. 4d. forming a total receipt of £2259 9s. 11½d. The total expenditure, for the same period, amounted to £2275 9s. 6½d.—*Report of the Wicklow Gold Mines, Tr. Dub. Soc. vol. ii.*

“ ‘ The Exchequer (of Caen) acquired very great consequence and extent, when our Dukes became masters of Anjou, Poitou, and Aquitaine. The city of Caen was then the seat of the government, not only of those provinces, but also of Great Britain. The Exchequer of England was annually exhausted to fill the coffers of that of Caen, and, according to the registers kept in the Tower at London, we find that the treasury of Caen received, in one year, 23,730 marcs of silver, sent by the treasury of London, besides 400 marcs of silver, and 200 ounces of gold sent by that of Ireland; an enormous sum of money for those times.’ ”—*Vallancey. Trans. of the Dub. Soc. vol. ii. p. 98.*

TO THE PATRONS OF THIS EDITION.

IT may be necessary to observe, from an opinion generally entertained of the incorrectness of a Dublin edition, that there are deviations from the received orthography in this work, which a reader, unacquainted with the writings of our author, might consider errors of the press; as, in the preceding pages, in *least*, *parliament*, *feudal*, *knowledge*, *acknowledge*, which are written *lest*, *parlement*, *feodal*, *knowlege*, *acknowlege*. In this manner they appear in all the editions that have issued from the London press; and as this edition will yield to none, in accuracy, &c. no deviation can be attempted in it. The reader, therefore, will please to remark, that the repetition of the same orthography will render it apparent, that it has been chosen by the author; and it will also be seen, that it is more agreeable to the root from whence the word is derived, than that

CLASS I.

Quadrupeds.



CLASS I,

Quadrupeds.

DIV. I. HOOFED.

II. DIGITATED.

III. PINNATED.

IV. WINGED.

DIV. I.

SECT. I. WHOLE HOOFED.

GENUS

I. HORSE.

SECT. II. CLOVEN HOOFED.

• With horns.

II. OX.

III. SHEEP.

IV. GOAT.

V. DEER.

**** Without horns.**

VI. HOG.

Div. II. DIGITATED.

SECT. I. TEETH cutting, six in each jaw;

Canine, two in each jaw, large,
distant from the cutting teeth.

Rapacious, carnivorous.

GENUS

VII. DOG.

VIII. CAT.

IX. BADGER.

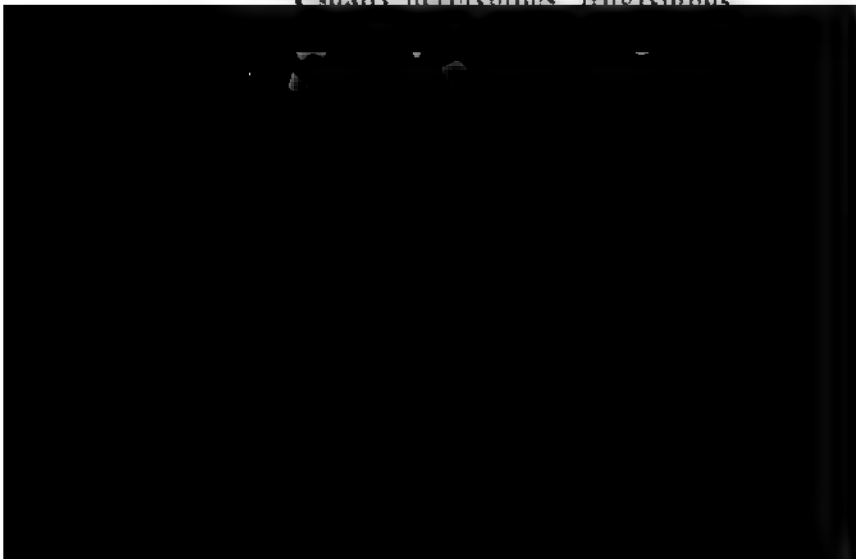
X. WEESEL.

XI. OTTER.

SECT. II. TEETH cutting, two in each jaw,

very distant from the grinders.

Usually herbivorous, frugivorous.



DIV. III. PINNATED.

GENUS

XIX. SEAL.

DIV. IV. WINGED.

XX. BAT.



CLASS I.

Quadrupeds.

DIV. I. HOOFED.

SECT. I. WHOLE HOOFED.

GENUS I. HORSE.

TEETH cutting, six in each jaw.

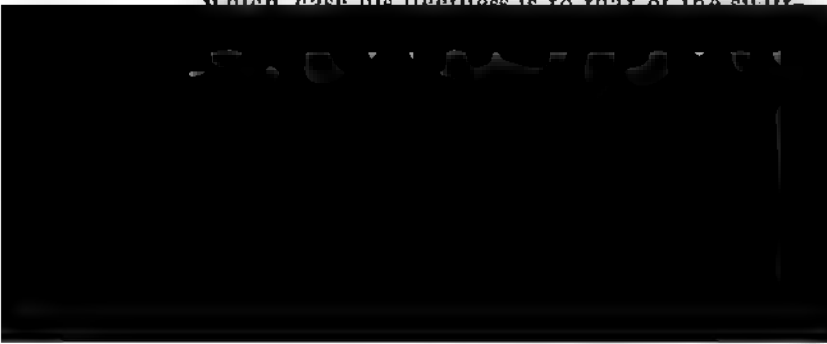
<i>Raii syn. quad.</i> 62.	<i>Equus auriculis brevibus erectis, 1. Generous.</i>
<i>Merret pinax.</i> 166.	juba longa. <i>Brisson quad.</i> 69.
<i>Gesn. quad.</i> 404.	<i>Eq. Caballus. Gm. Lin.</i> 209.
<i>Klein quad.</i> 4.	<i>Eq. cauda undique setosa. Faun.</i>
<i>De Buffon tom. iv.</i> 174.	<i>Suec.</i> 47.
<i>tab.</i> 1—10.	<i>Br. Zool.</i> 1. <i>Hist. quad.</i> I. 1.

HORSE.	MARE.	GELDING.
<i>Brit.</i> March, Ceffyl	Caseg	Dyspaiddfarch
<i>Fren.</i> Le Cheval	LaCavale, Jument.	Cheval ongre
<i>Ital.</i> Cavallo	Cavalla	
<i>Span.</i> Cavallo	Yegua	
<i>Port.</i> Cavallo	Egoa	
<i>Germ.</i> Pserd	Stut, Motsch	
<i>Dut.</i> Paerd, Hengst	Merrie	
<i>Swed.</i> Hæst	Stood, Horss	
<i>Dan.</i> Hæst, Oeg, Hingst	Stod-Hæst, Hoppe.	

THE breed of horses in *Great Britain* is as mixed as that of its inhabitants. The frequent introduction of foreign horses has given us a variety, that no single country can boast of:

most other kingdoms produce only one kind, while ours, by a judicious mixture of the several species, by the happy difference of our soils, and by our superior skill in management, may triumph over the rest of *Europe*, in having brought each quality of this noble animal to the highest perfection.

Swiftness. In the annals of *Newmarket*, may be found instances of horses that have literally outstripped the wind, as the celebrated M. *Condamine* has shewn in his remarks* on those of *Great Britain*. *Childers*† is an amazing instance of rapidity, his speed having been more than once exerted equal to 82½ feet in a second, or near a mile in a minute. The same horse has also run the round course at *Newmarket* (which is about 400 yards less than 4 miles) in six minutes and forty seconds; in which case his fleetness is to that of the swift



length to twenty-three feet royal, the latter only that of eighteen feet and a half royal.*

Horses of this kind, derive their origin from *Arabia*; the seat of the purest, and most generous breed.†

The species used in hunting, is a happy combination of the former with others superior in strength, but inferior in point of speed and lineage: an union of both is necessary, for the fatigues of the chace must be supported by the spirit of the one as well as by the vigor of the other.

No country can bring a parallel to the

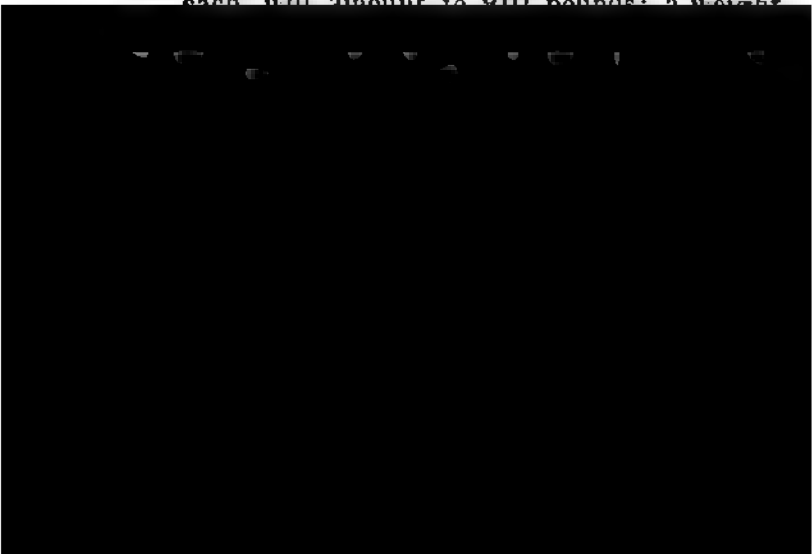
* After *Childers*, *Eclipse*, the property of the late Mr. O'Kelly, was the swiftest horse known in *England*. He died *February* 26, 1789, in his twenty-fifth year, having won £25,000, which is more than any other horse did for one person. After he was past running, he covered, in 1788, forty mares at thirty guineas each, exclusive of those of his owner. His heart was of an extraordinary size; it weighed thirteen pounds, which was supposed to have been the cause of his amazing powers. He never was beat. M. T.

† In 1787 Captain *Rattray*, of the *Phœnix Indiaman*, brought over a beautiful *Arabian* stallion of a grey color, the price of which, with the expence of the passage, amounted to the enormous sum of fifteen hundred and ten pounds. M. T.

For a particular account of the *Arabian* horses, the reader is referred to p. 16, &c.

strength and size of our horses destined for the draught, or, to the activity and strength united, of those that form our cavalry.

Strength. In our capital there are instances of single horses that are able to draw on a level surface, for a small space, the weight of three tons, but could with ease, and for a continuance, draw half that weight.* The pack-horses of *Yorkshire*, employed in conveying the manufactures of that county to the most remote parts of the kingdom, usually carry a burden of 420 pounds, and that indifferently over the highest hills of the north, as well as on the most level roads; but the most remarkable proof of the strength of our *British* horses, is to be drawn from that of our mill-horses; some of these will carry at one load thirteen measures, which at a moderate computation of seventy pounds each, will amount to 910 pounds: a weight



greater than to and from the adjacent hamlets.

Our cavalry in the* late campaigns (when *British Cavalry* they had an opportunity) shewed over those of our allies, as well as of the *French*, a great superiority both of strength and activity: the enemy was broken through by the impetuous charge of our squadrons; while the *German* horses, from their great weight and inactive make, were unable to second our efforts; though those troops were actuated by the noblest ardor.

The present cavalry of this island only sup- *Antient.* ports its antient glory; it was eminent in the earliest times: our scythed† chariots, and the activity‡ and good discipline of our horses, even struck terror into *Cæsar's* legions: and the *Britons*, as soon as they became civilized enough to coin, took care to represent on their money the animal for which they were so celebrated. It is now impossible to trace out the peculiar sort, for those which exist among the *indigenæ* of *Great Britain*, such as the little

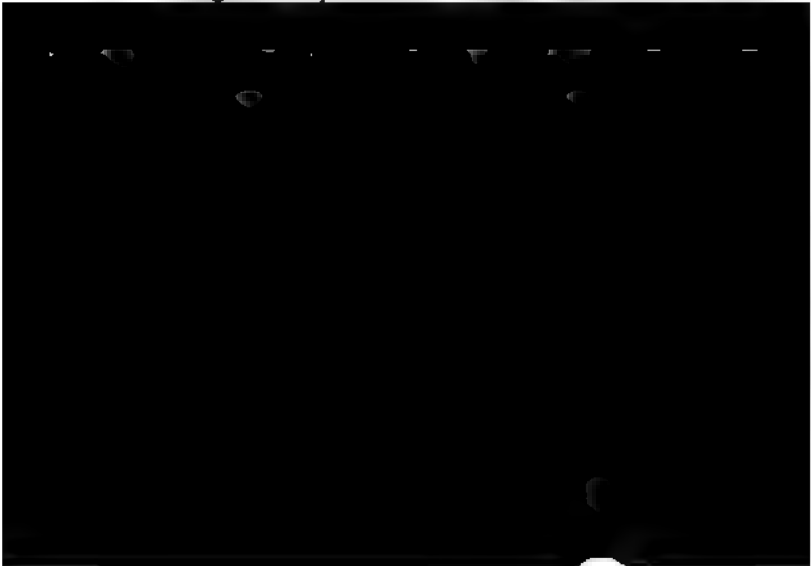
* During the war which was terminated in 1763. Ed.

† *Corinos* vocant, quorum falcatis axibus utuntur. *Pomp. Mela*, lib. iii. c. 6.

‡ *Cæsar Com.* lib. iv. *Strabo.* lib. iv.

horses of *Wales* and *Cornwall*, the hobbies of *Ireland*, and the shelties of *Scotland*, though admirably well adapted to the uses of those countries, could never have been equal to the work of war; but probably we had even then a larger and stronger breed in the more fertile and luxuriant parts of the island. Those we employ for that purpose, or for the draught, are an offspring of the *German* or *Flemish* breed, meliorated by our soil, and a judicious culture.

The *English* were ever attentive to an exact culture of these animals, and in very early times set a high value on their breed. The esteem that our horses were held in by foreigners so long ago as the reign of *Athelstan*, may be collected from a law of that monarch prohibiting their exportation, except they were designed as presents. These must have been




hold of the advantages this gave of improving our breed. *Roger de Belesme*, created Earl of *Shrewsbury* by *William* the Conqueror, is the first that is on record: he introduced the *Spanish* stallions into his estate in *Powysland*, from which cause that part of *Wales* was for many ages celebrated for a swift and generous race of horses. *Giraldus Cambrensis*, who lived in the reign of *Henry II.* takes notice of it;* and *Michal Drayton*, cotemporary with *Shakespeare*, sings their excellence in the sixth part of his *Polyolbion*. This kind was probably destined to mount our gallant nobility, or courteous knights for feats of chivalry, in the generous contests of the tilt-yard. From these sprung, to speak the language of the times, the *Flower of Coursers*, whose elegant form added charms to the rider, and whose activity and managed dexterity gained him the palm in that field of gallantry and romantic honor.

Notwithstanding my supposition, in a former edition, races were known in *England* in *Races*.

* In hac tertia *Walliæ* portione quæ *Powisia* dicitur sunt equitia peroptima, et equi emissarii laudatissimi, de *Hispaniensium* equorum generositate, quos olim Comes *Slopesburia* *Robertus de Belesme* in fines istos adduci curaverat, originaliter propagati. *Itin. Camb.* 222.

very early times. *Fitz-Stephen*, who wrote in the days of *Henry II.* mentions the great delight that the citizens of *London* took in the diversion; but by his words, it appears not to have been designed for the purposes of gaming, but merely to have sprung from a generous emulation of shewing a superior skill in horsemanship.

Races appear to have been in vogue in the reign of Queen *Elizabeth*, and to have been carried to such an excess as to injure the fortunes of the nobility. The famous *George Earl of Cumberland* is recorded to have wasted more of his estate than any of his ancestors; and chiefly by his extreme love for horse-races, tiltings, and other expensive diversions. It is probable that the parsimonious Queen did not approve of it, for races are not among the diversions exhibited at *Kenilworth* by her favo-



known in these kingdoms in earlier times; we only assert a different mode of it; gentlemen being then their own jockies, and riding their own horses. Lord *Herbert* of *Cherbury* enumerates it among the sports that gallant philosopher thought unworthy of a man of honor. "The exercise, (says he,) I do not approve of, is running of horses, there being much cheating in that kind; neither do I see why a brave man should delight in a creature whose chief use is to help him to run away."*


The increase of our inhabitants, and the extent of our manufactures, together with the former neglect of internal navigation to convey those manufactures, multiplied the number of our horses: an excess of wealth, before unknown in these islands, increased the luxury of carriages, and added to the necessity of an extraordinary culture of these animals: their

* The Life of *Edward Lord Herbert of Cherbury*, published by Mr. *Walpole*, p. 51.

Jarvis Markham, who wrote on the management of horses in 1599, mentions running horses; but those were only designed for matches between gentleman and gentleman.

high reputation abroad, has also made them a branch of commerce, and proved another cause of their vast increase.

As no kingdom can boast of parallel circumstances, so none can vie with us in the number of these noble quadrupeds; it would be extremely difficult to guess at the exact amount of them, or to form a periodical account of their increase: the number seems very fluctuating: *William Fitz-Stephen* relates, that in the reign of *King Stephen*, *London* alone poured out 20,000 horsemen in the wars of those times: yet we find that in the beginning of *Queen Elizabeth's* reign,* the whole kingdom could not supply 2000 horses to form our cavalry: and even in the year 1588, when the nation was in the most imminent danger from the *Spanish* invasion, all the cavalry which could then be furnished amounted only to 3000: to



the banners of *Elizabeth*, a corps well formed, and such as might be opposed to so formidable an enemy as was then expected: but such is their present increase, that in the late war,* the number employed was 13,575;† and such is our improvement in the breed of horses, that most of those which are used in our waggons and carriages‡ of different kinds, might be applied to the same purpose: of those, our capital alone employs near 22,000.

A horse can engender at two years, or two years and a half. Mares will breed at two years old, and will continue breeding till five and twenty, and even till thirty. *Propagation.*

The learned *M. de Buffon* has almost ex-

* Preceding the peace of 1763. Ed.

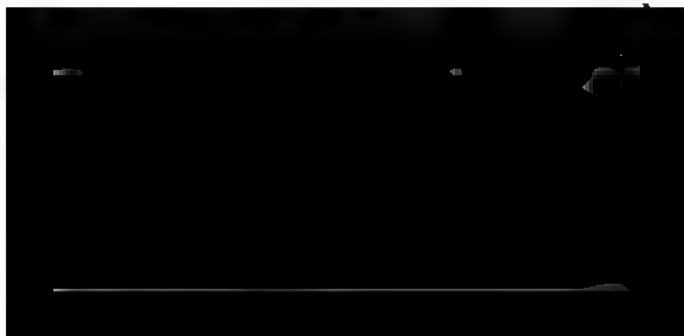
† In the war with revolutionary *France*, wherein the naval and military force of *Britain* was increased to an unprecedented magnitude, the number of horses, employed in the military service, received a proportionate increase, without detriment or impediment to the numerous domestic, agricultural and commercial purposes, in which this valuable animal is employed. The number of *British* cavalry, employed in 1810, amounting to 23,807, of colonial and foreign cavalry, to 3,594, exclusive of horses attached to the artillery, and the waggon train. Ed.

‡ It may be also observed, that the use of coaches was not introduced into *England* till the year 1564.

hausted the subject of the natural history of the horse, and the other domestic animals; and left very little for after-writers to add. We may observe, that this most noble and useful quadruped is endowed with every quality that can make it subservient to the uses of mankind, and those qualities appear in a more exalted, or in a less degree, in proportion to our various necessities.

Undimmed courage, added to a docility half reasoning, is given to some, which fits them for military services. The spirit and emulation so apparent in others, furnish us with that quality, which is admirably adapted for the service of the more noble and generous pleasure of the chase.

Patience and perseverance appear strongly in that most useful kind destined to bear the



nice, together with a certain consciousness of the services we can render them. Most of the hoofed quadrupeds are domestic, because necessity compels them to seek our protection: wild beasts are provided with feet and claws, adapted to the formation of dens and retreats from the inclemency of the weather; but the former, destitute of these advantages, are obliged to run to us for artificial shelter and harvested provision; as nature, in these climates, does not throughout the year supply them with necessary food.

But still, many of our tame animals must by accident endure the rigor of the season: to prevent which inconvenience, their feet (for the extremities suffer first by cold) are protected by strong hoofs of a horny substance.

The tail too is guarded with long bushy hair that protects it in both extremes of weather; during the summer it serves by its pliancy and agility, to brush off the swarms of insects, which are perpetually attempting either to sting the animal, or to deposit their eggs in the *rectum*, and the same length of hair contributes to guard it from the cold in winter; but we, by the absurd and cruel custom of

Docking. docking, a practice peculiar to our country, deprive these animals of both advantages: in the last war our cavalry suffered so much on that account, that we now seem sensible of the error, and if we may judge from some recent orders in respect to that branch of the service,* it will for the future be corrected.

Thus is the horse provided against the two greatest evils he is subject to from the seasons.

Diseases. His natural diseases are few; but our ill usage, or neglect, or, which is very frequent, our over

* The following remark of a noble writer on this subject is too sensible to be omitted:—

‘ I must own I am not possessed with the *English* rage of cutting off all extremities from horses. I venture to declare I should be well pleased if their tails, at least a switch or a nag tail, (but better if the whole) was left on. It is hardly credible what a difference, especially at a certain season of the year, this single alteration would make in our cavalry, which though naturally superior to all other I have ever seen, are however, long before the

care of him, brings on a numerous train, which are often fatal. Among the distempers he is naturally subject to, are the worms, the bots, and the stone: the species of worms that infest him are the *lumbrici*, and *ascarides*; both these resemble those found in human bodies, only they are larger: the bots are the *erucæ*, or caterpillars of the *æstrus*, or gadfly; these are found both in the *rectum*, and in the stomach, and when in the latter bring on convulsions, that often terminate in death.

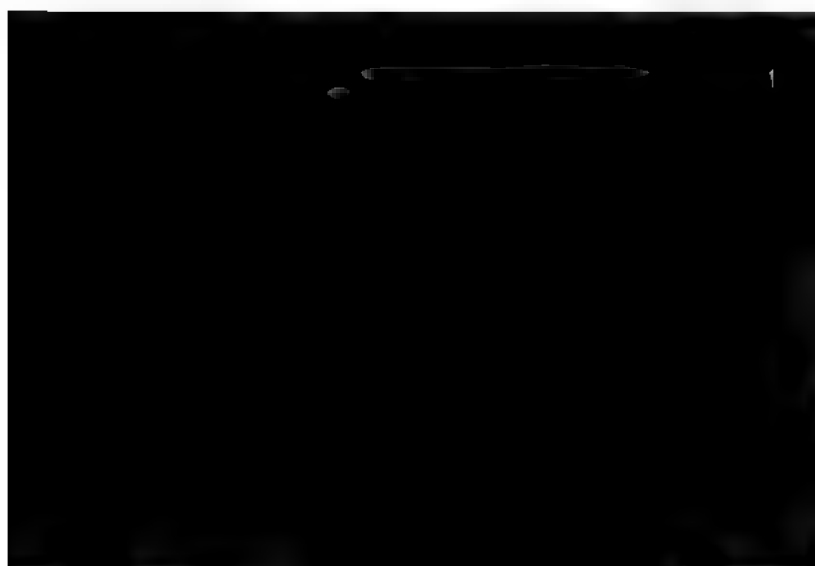
The stone is a disease the horse is not frequently subject to, yet we have seen two examples of it; the one in a horse near *High Wycombe*, which voided sixteen *calculi*, each of an inch and a half diameter; the other was of a stone taken out of the bladder of a horse, and deposited in the cabinet of the late Dr. *Mead*, which weighed eleven ounces.* These stones are formed of several crusts, each very smooth and glossy; their form triangular, but their edges rounded, as if by collision against each other.

The duration of the life of the horse seldom *Age*.

* *Museum Meadianum*, p. 261.

exceeds twenty-five or thirty years. M. *Tunstall* adduced an instance of a horse left at *Manchester* in 1745, which died there in 1788 at the advanced age of forty-eight: it, almost to the last, carried goods daily to the market.

The all-wise Creator hath, finely, limited the several services of domestic animals towards the human race, and ordered that the parts of such, which in their lives have been the most useful, should after death contribute the least to our benefit. The chief use that the *cravie* of the horse can be applied to, is for collars, traces, and other parts of the harness; and thus, even after death, he preserves some analogy with his former employ. The hair of the mane is of use in making wigs; of the tail in making the bottoms of chairs, floor-cloths, and cards, and to the angler in making lines.



ADDITIONS TO THE HISTORY OF THE HORSE.

THE representative of this species* is a native of *Yemen*, in *Arabia Felix*; the property of the late Lord *Grosvenor*, taken from a picture in possession of his Lordship, painted by Mr. *Stubbs*, an artist not less happy in representing animals in their stiller moments, than when agitated by their furious passions; his matchless paintings of horses will be lasting monuments of the one, and that of the lion and panther of the other.

This horse, by its long residence among us, may be said to be naturalised, therefore we hope to be excused for introducing it here, notwithstanding its foreign descent. From its great beauty it may be presumed that it derives its lineage from *Monaki Shadúki*, of the pure race of horses, purer than milk.†

Arabia produces these noble animals in the highest perfection; first, because they take

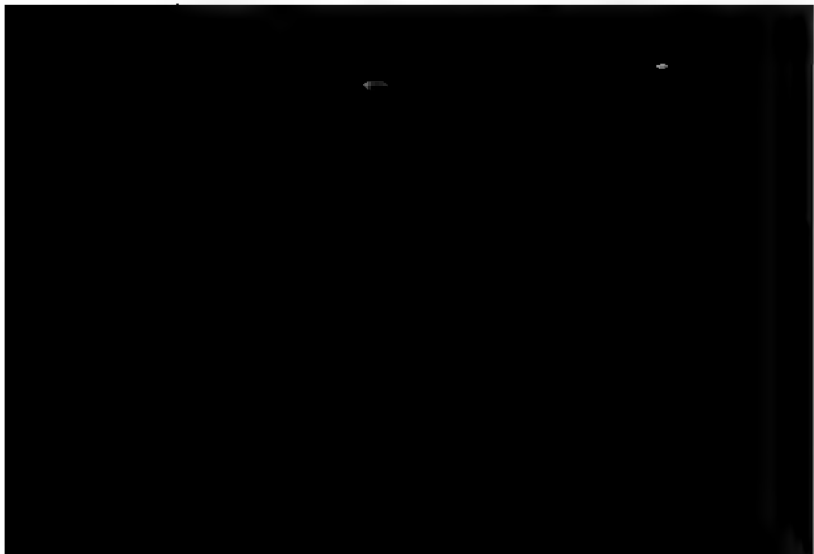
* Plate 1.

† Vide the *Arabian* certificate, in a following note, for the meaning of this phrase.

their origin from the wild unmixed breeds that formerly were found in the deserts,* which had as little degenerated from their primæval form and powers as the lion, tiger, or any other creature which still remains in a state of nature unchanged by the discipline of man, or harvested provision.

The *Arabs* place their chief delight in this animal; it is to them† as dear as their family, and is indeed part of it: men, women, children, mares, and foals, all lie in one common tent, and they lodge promiscuously without fear of injury.

* *Leo Africanus*, who wrote in the time of *Leo X.* says, that in his days great numbers of wild horses were found in the *Numidian* and *Arabian* deserts, which were broke for use. He adds, that the trial of their swiftness was made against the *Lant*, or the *Ostrich*; and if they could overtake either of those animals, were valued at a



. This constant intercourse produces a familiarity that could not otherwise be effected; and creates a tractability in the horses that could arise only from a regular good usage, little acts of kindness, and a soothing language, which they are accustomed to from their masters: they are quite unacquainted with the spur; the lest touch with the stirrup sets these airy coursers in motion; they start forward with a fleetness which surpasses that of the Ostrich,* yet they are so well trained as to stop in their most rapid speed by the slightest check of the rider: there are sometimes instances of their being mounted without either bridle or saddle, when they shew such compliance to their rider's will, as to be directed in their course by the mere motion of a switch.†

from the looks of the envious. To understand the first part of this speech, it must be observed, that it is usual for many *Arabs*, of the poorer rank, to join in the purchase of a horse, the original owner generally retaining one share. This, as well as most of the other particulars relating to the *Arabian* horse, are taken from *M. D'Arvieux's* curious account of *Arabia*, p. 167, *London*, 1732.

* For an account of its speed, *vide Adanson's voy.* 85.

† *Tavernier's Travels*, i. 63.

*Paret in obsequium lenae moderamine virge,
Verbera sunt præcepta fugæ; sunt verbera
frænd.**

Several things concur to maintain this perfection in the horses of Arabia; such as the great care the Arabs take in preserving the breed genuine; and by permitting none but stallions of the first form to have access to the mares: this is never done but in the presence of a witness, the secretary of the Emir, or some public officer; he asserts the fact, records the name of the horse, mare, and whole pedigree of each; and these attestations are care-

* *Nomenclon Cynog.* 267.

† The reader is here presented with an original attestation, some of which *M. D'Arvieux* says have been preserved for above 500 years in the public records.



fully preserved, for on them depends the future price of the foal.

which he bought of him, and He affirm'd to be *Monaki Shaduki*,† but he was not satisfied with this but desir'd the Testimony of the *Arabs*, who bred the Horse and knew how he came to *Sheikh Morad*; whereupon there appear'd certain *Arabs* of Repute whose names are under-mention'd, who testified and declar'd that the Grey Horse which the Consul formerly bought of *Sheikh Morad* is *Monaki Shaduki* of the pure Race of Horses, purer than Milk,‡ and that the Beginning of the Affair was, that *Sheikh Saleb*, *Sheikh of Alsabal*, bought him of the *Arabs* of the Tribe of *al Mohammadat*, and *Sheikh Saleb* sold him to *Sheikh Morad Ebn al Hajj Abdollah*, *Sheikh of Safad*, and *Sheikh Morad* sold him to the Consul afore-said, when these Matters appear'd to us, and the Contents were known, the said Gentleman desir'd a Certificate thereof, and Testimony of the Witnesses, whereupon we wrote him this Certificate, for him to keep as a Proof thereof. Dated Friday 28 of the latter *Rabi* in the year 1135. (i. e. 29 January 1772.)

Witnesses,

Sheikh Jumat al Falibau of the *Arabs*
of *al Mohammadat*.

Ali Ebn Taleb al Kaabi.

Ibrahim his Brother.


Mohammed al Adhra Sheikh Alfarifat.
Khamis al Kaabi.

† These are the Names of the two Breeds of Arab Horses, which are reckoned pure and true, and those which are of both these Breeds by Father and Mother, are the most noble and free from Bastardy.

‡ A Proverbial Expression.

Æthiopia has with some writers the credit of having originally furnished *Arabia* with its fine race of horses; but we believe the reverse, and that they were introduced into that empire by the *Arabian* princes, whose lineage to this day fills that throne. The horses of that country are spirited and strong, and generally of a black color: they are never used in long journeys, but only in battle or in the race, for all servile work is done by mules: the *Æthiopians* never shoe them, for which reason, on passing through stony places, they dismount, and ride on mules, and lead their horses;* so from this we may collect, that this nation is not less attached to these animals than the *Arabs*.

Ægypt has two breeds of horses, one its own, the other *Arabian*; the last are most esteemed, and are bought up at a great price, in order to be sent to *Constantinople*: but such is the



but in general they are far inferior in point of value; and for the same reason as is given in the last article, the great insecurity of property under the *Turkish* government. The breed was once very famous: M. *D'Arvieux** says, that when he was there in 1668, he met with a mare that he thought worthy of the stud of his *grand Monarque*, when in the height of his glory; but Doctor *Shaw* informs us, that at present the case is entirely altered.†

Notwithstanding *Spain* has been celebrated of old for the swiftness of its horses, yet it must have received great improvement from those brought over by their conquerors, the *Saracens*. According to *Oppian*,‡ the *Spanish* breed had no other merit than that of fleetness, but at present we know that they have several other fine qualities.

To sum up the account of this generous animal, we may observe, that every country that boasts of a fine race of horses, is indebted to *Arabia*, their primæval seat. No wonder then, that the poetic genius of the author of the book

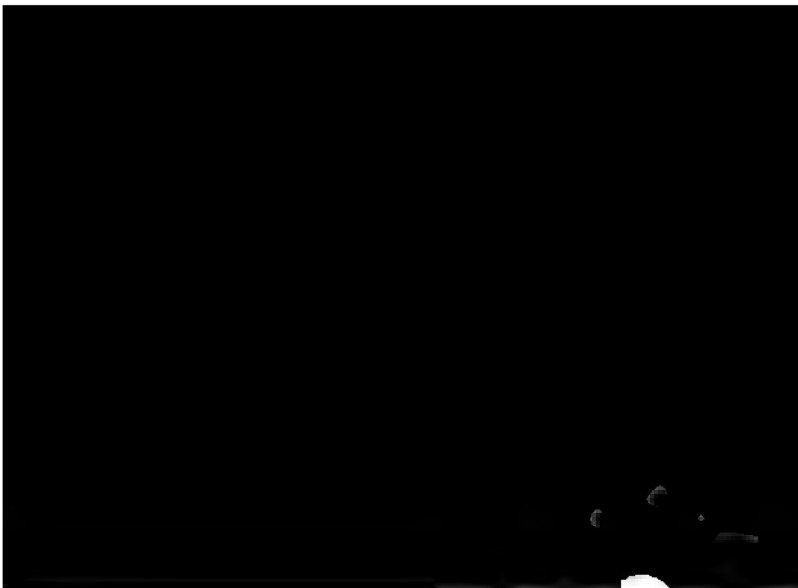
* *D'Arvieux*, 173.

† *Shaw's Travels*, 238.

‡ *Cyneg. lib. i. v.* 284.

of *Job*, (who not only lived on the very spot, but even at a time when the animal creation still enjoyed much of its original perfection,) should be able to compose that sublime description which has always been the admiration of every person of genuine taste.*

* *Job* ch. xxxix. v. 19. to 25.



2. ASS.

Asinus. Raii syn. quad. 63. Equus asinus. Gm. Lin. Gesn. quad. 5. 211. Klein. quad. 6. Eq. caudæ extremitate setosa cruce nigra super humeros. Faun. Suec. 35. De Buffon tom. iv. 377. tab. 11—13. Equus auriculis longis flaccidis, juba brevi. Brisson 8, quad. 70. Br. Zool. 5. Hist. quad. I.*

<i>Brit. Asyn, fæm. Asen</i>	<i>Germ. Esel</i>
<i>Fren. L'Ane, f. L'Anesse</i>	<i>Dut. Eezel</i>
<i>Ital. Asino, Miccio. f. Miccia</i>	<i>Swed. Asna</i>
<i>Span. Asno, Borrico. f. Borrica</i>	<i>Dan. Asen, Esel.</i>
<i>Port. Asno, Burro. f. Asna, Burra</i>	


THIS animal, though now so common in all parts of these islands, was entirely lost among us during the reign of Queen *Elizabeth*; *Hollinshed*† informing us, that in his time “our lande did yeelde no asses.” But we are not to

* *Habitat in magnatum prædiis rarius. Faun. Suec. 35. edit. 1746.* We imagine that since that time the species is there extinct, for *Linnaeus* has quite omitted it in the last edition of the *Fauna Suecica*.

† 109.

suppose so useful an animal was unknown in these kingdoms before that period; for mention is made of them so early as the time of King* *Ethelred*, above four hundred years preceding; and again in the reign of† *Henry III.* so that it must have been owing to some accident, that the race was extinct during the days of *Elizabeth*. We are not certain of the time it was again introduced; probably in the succeeding reign, when our intercourse with *Spain* was renewed, in which country this animal was greatly used, and where the species is in great perfection..

The ass is originally a native of *Arabia*, and other parts of the East: a warm climate produces the largest and the best, their size and spirit declining in proportion as they advance into colder regions. "With difficulty," says Mr. *Adams*, speaking of the asses of *Senegal*.



“black list that crosses the back and shoulders had a good effect. These were the asses brought by the *Moors* from the interior parts of the country.”* The migration of these beasts has been very slow; we see how recent their return is in *Great Britain*: in *Sweden* they are even at present a sort of rarity, nor does it appear by the last history of *Norway*,† that they had yet reached that country. They are at present naturalized in this kingdom, our climate and soil seems to agree with them; the breed is spread thro’ all parts, and their utility is more and more experienced.

They are now introduced into many services that were before allotted to horses; which will prove of the utmost use in saving those noble animals for worthier purposes. Many of our richest mines are in situations almost inaccessible to horses, but where these sure-footed creatures may be employed to advantage, in conveying our mineral treasures to their respective marts: we may add too, that since our horses are become a considerable article of

* *Voy. Senegal.* 212.

† *Pontoppidan's Nat. History of Norway.*

commerce, and bring annually great sums into these kingdoms, the cultivation of an animal that will in many cases supply their place, and enable us to enlarge our exports, certainly merits our attention.

Age. The age of the ass may be equal to that of the horse. One which died in 1782, had been employed in turning the water-wheel at the deep well in *Carisbrooke* castle for forty years.

Qualities. The qualities of this animal are so well known, that we need not expatiate on them; its patience and perseverance under labor, and its indifference in respect to food, need not be mentioned; any weed or thistle contents it: if it gives the preference to any vegetable, it is to the *Plaintain*; for which we have often seen it neglect every other herb in the pasture. The narrow-leaved *Plaintain** is greedily cat



MULE.

Mulus, Raii syn. quad. 64. tis, juba brevi. Brisson
Gesn. quad. 702. quad. 74.


Asinus biformis, Klein. quad. 6. Equus Mulus. Gm. Lin. 212.
Famn. Succ. 35. edit. 1.

Charlton ex. 4. Br. Zool. 6, Hist. quad. I. 8.
Equus auriculis longis erect.

<i>Brit. Mul, fem. Mules</i>	<i>Germ. Maulthier, Maulesel</i>
<i>Fren. Le Mulet.</i>	<i>Dut. Muyl-Eesel</i>
<i>Ital. Mula</i>	<i>Swed. Mulasna</i>
<i>Span. Mulo</i>	<i>Dan. Muule, v. Muul-Eeel.</i>
<i>Port. Mala</i>	

THESE useful and hardy animals are the offspring of the horse and ass, or ass and mare; those produced between the two last are esteemed the best, as the mule is observed to partake less of the male than the female parent; not but they almost always inherit in some degree the obstinacy of the parent ass, though it must be confessed that this vice is heightened by their being injudiciously broke: instead of mild usage, which gently corrects the worst qualities, the mule is treated with

cruelty from the first, and is so habituated to blows, that it is never mounted or loaded without expectation of ill treatment; so that the unhappy animal either prepares to retaliate, or in the terror of bad usage, becomes invincibly retrograde. Could we prevail on our countrymen to consider this animal in the light its useful qualities merit, and pay due attention to its breaking, they might with success form it for the saddle, the draught, or the burden. The size and strength of our breed is at present so improved by the importation of the *Spanish* male asses, that we shall soon have numbers that may be adapted to each of those uses. Persons of the first quality in *Spain* are drawn by them; for one of which (as Mr. Clarke informs us*) fifty or sixty guineas is no uncommon price; nor is it surprizing, if we consider how far they excel the horse in draught, in a



spurious offspring of any other animal generate any farther: all these productions may be looked on as monsters; therefore nature, to preserve the original species of animals entire and pure, wisely stops, in instances of deviation, the powers of propagation.

This preference of pasturage to tillage was delivered down from our *British* ancestors to much later times, and continued equally prevalent during the whole period of our feudal government: the chieftain, whose power and safety depended on the promptness of his vassals to execute his commands, found it his interest to encourage those employments that favoured that disposition; the vassal, who made it his glory to fly at the first call to the standard of his chieftain, was sure to prefer that employ, which might be transacted by his family with equal success during his absence. Tillage would require an attendance incompatible with the services he owed the baron, while the former occupation not only gave leisure for those duties, but furnished the hospitable board of his lord with ample provision, of which the vassal was an equal partaker. The reliques of the larder of the elder *Spencer* are evident proofs of the plenty of cattle in his

cibus, ut se exigua parte diei pecora impleant, ut nisi pabulo prohibeantur, diutius pasta dissiliant. Lib. iii. c. 6.

Hollinshed says, (but we know not on what authority,) that the *Romans* preferred the *British* cattle to those of *Liguria*. *Desc. Br.* 109.

days; for after his winter provisions may have been supposed to have been mostly consumed, there were found, so late as the month of *May*, in salt, the carcasses of not fewer than 80 beeves, 600 bacons, and 600 muttons.* The accounts of the several great feasts in after times, afford amazing instances of the quantity of cattle that were consumed in them. This was owing partly to the continued attachment of the people to grazing,† partly to the preference that the *English* at all times gave to animal food. The quantity of cattle that appear from the last calculation to have been consumed in our metropolis, is a sufficient argument of the vast plenty of these times; particularly when we consider the great advancement of tillage, and the numberless variety of provisions, unknown to past ages, that are now introduced into these kingdoms from all parts of the world.‡

* *Hume's history of England*, li. 153.

† *Polyd. Virgil Hist. Angl.* vol. i. 5. who wrote in the time of Henry VIII. says, *Angli plures pecuarii quam aratores.*

‡ That inquisitive and accurate historian *Maitland* furnishes us with this table of the quantity of cattle that


Our breed of horned cattle has in general been so much improved by a foreign mixture, that it is difficult to point out the original kind of these islands. Those which may be supposed to have been purely *British* are far inferior in size to those on the northern part of the *European* continent: the cattle of the highlands of *Scotland* are exceedingly small, and many of them, males as well as females, are hornless: the *Welsh* runts are much larger: the black cattle of *Cornwall* are of the same size with the last. The large species that is now cultivated through most parts of *Great Britain* is either entirely of foreign extraction, or our own improved by a cross with a foreign kind. The *Lincolnshire* kind derive their size from the *Holstein* breed; and the large horned cattle that are bred in some parts of *England*



and in the park belonging to *Chillingham* in *Northumberland*, herds of cattle properly derived from the savage breed. They have lost their manes, but retain their color fierceness: they are of a middle size; long legs, with black muzzles, and ears: their necks are fine, and with a bold and elegant bend. The keeper of those at *Chillingham* said, that the weight of the ox was 38 stones; of the cow that their hides were more esteemed by the merchants than those of the tame; and that they would give six-pence per stone more for them. These cattle are wild as any deer: on being reached they instantly take to flight and run away at full speed: never mix with the tame species; or come near the house unless attracted by hunger in very severe weather. When it is necessary to kill any they are always shot: if the keeper only wounds the

tree, or his life would be in danger from the furious attacks of the animal, which will never desist till a period is put to its life.

Frequent mention is made of our savage cattle by historians. One relates that *Robert Bruce* was (in chasing these animals) preserved from the rage of a wild Bull by the intrepidity of one of his courtiers, from which he and his lineage acquired the name of *Turn Bull*. *Fitz-Stephen** names these animals (*Uri Sylvestres*) among those that harbored in the great forest that in his time lay adjacent to *London*. Another enumerates among the provisions at the great feast of *Nevill*† archbishop of *York*, six wild Bulls; and *Sibbald* assures us that in his days a wild and white species was found in the mountains of *Scotland*, but agreeing in form with the common sort. Bishop *Lessley* says, that in his time (1598), cattle



Germany, and which might have been common to the continent and our island: the loss of their savage vigor by confinement might occasion some change in the external appearance, as is frequent with wild animals deprived of liberty; and to that we may ascribe their loss of name. The *Urus* of the *Hercynian* forest described by *Cæsar*, book vi. was of this kind, the same which is called by the modern *Germans*, *Aurochs*, i. e. *Bos sylvestris*.*

The ox is the only horned animal in these *Uses*. islands that will apply his strength to the service of mankind. It is now generally allowed, that in many cases oxen are more profitable in the draught than horses; their food, harness, and shoes being cheaper, and should they be lamed or grow old, an old working beast will be as good meat, and fatten as well, as a young one.

There is scarcely any part of this animal without its use. The blood, fat, marrow, hide, hair, horns, hoofs, milk, creme, butter, cheese, whey, urine, liver, gall, spleen, bones, and

* *Gesner Quad.* 144. In *Fitz-Stephen*, *Urus* is printed *Ursus*.

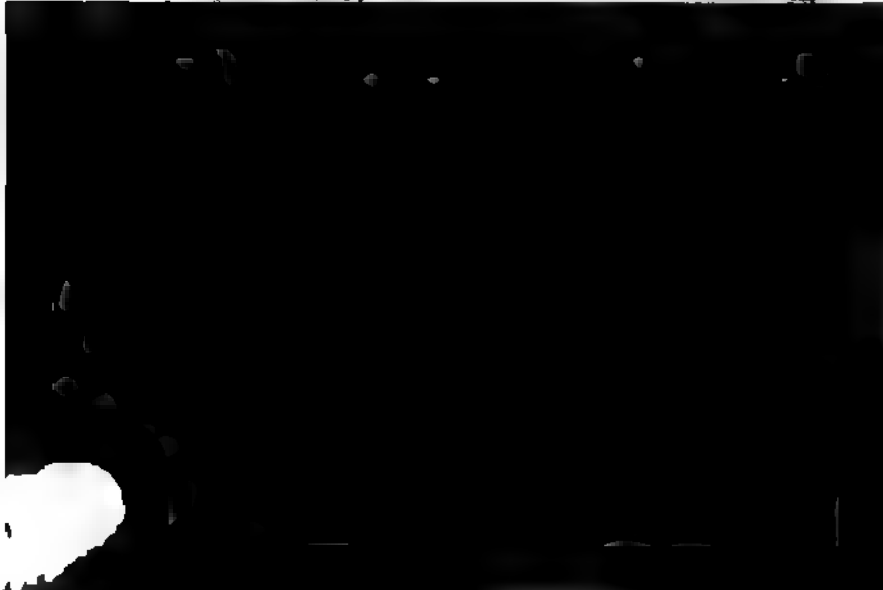
dung, have each their particular use in manufactures, commerce, and medicine.

The skin has been of great use in all ages. The antient *Britons*, before they knew a better method, built their boats with osiers, and covered them with the hides of bulls, which served for short* coasting voyages.

Primum cana salix madefacto vimine parvam
Texitur in Puppim, cæsoque induta juvenco,
Vectoris patiens, tumidum super emicat amœm:
Sic *Venetus* stagnante *Pado*, fusoque *Britannus*
Navigat oceano. *Lucan.* lib. iv. 131.

The bending willow into barks they twine;
Then line the work with spoils of slaughter'd kine.
Such are the floats *Venetian* fishers know,
Where in dull marshes stands the settling *Po*;
On such to neighboring *Gaul*, allured by gain,
The bolder *Britons* cross the swelling main. *Rome.*

Vessels of this kind are still in use on the *Irish* lakes; and on the *Dee* and *Severn*: in



At present, the hide, when tanned and curried, serves for boots, shoes, and numberless conveniences of life.

Vellum is made of calves skin, and gold-beaters skin is made of thin vellum, or a finer part of the ox's guts. The hair mixed with lime is a necessary article in building. Of the horns are made combs, boxes, handles for knives, and drinking vessels; and when softened by water, obeying the manufacturer's hand, they are formed into pellucid laminæ for the sides of lanthorns. The last conveniences we owe to our great king *Alfred*, who first invented them to preserve his candle time measurers from the wind;* or (as other writers will have it) the tapers that were set up before the reliques in the miserable tattered churches of that time.†

In medicine, the horns were employed as alexipharmics or antidotes against poison, the plague, or the small-pox; they have been dignified with the title of *English bezoar*, and are said to have been found to answer the end of the oriental kind: the chips of the hoofs,

* *Anderson's hist. of commerce*, I. 45.

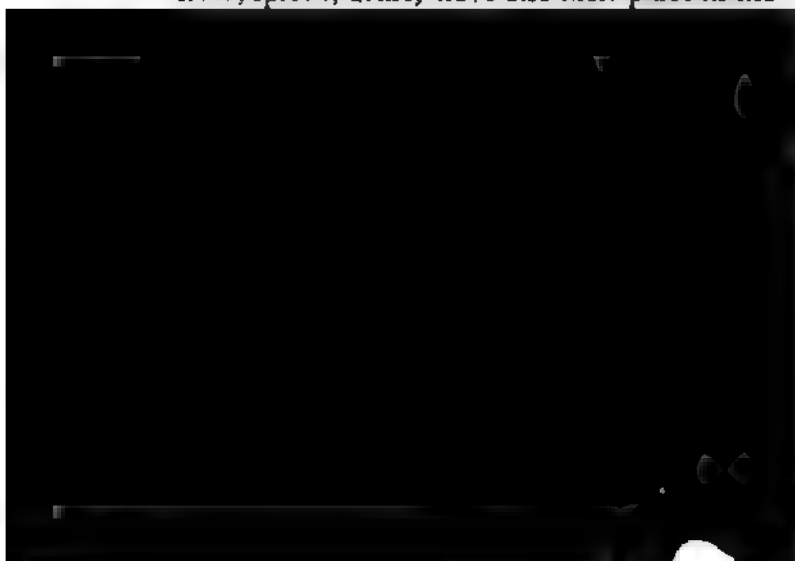
† *Staveley's hist. of churches*, 103.

and paring of the raw hides, serve to make carpenters glue.

The bones are used by mechanics, where ivory is too expensive, by which the common people are served with many neat conveniences at an easy rate. From the *tibia* and *carpus* bones is procured an oil much used by coach-makers and others in dressing and cleaning harness, and all trappings belonging to a coach; and bones calcined, afford a fit matter for tests for the use of the refiner in the smelting trade.

The blood is used as an excellent manure for fruit trees,* and is the basis of that fine color, the *Prussian* blue.

The fat, tallow, and suet, furnish us with light, and are also used to precipitate the salt that is drawn from briny springs. The gall, liver, spleen, urine, have also their place in the



GENUS III. SHEEP.

Horns twisted spirally, and pointing outwards.


<i>Ovis, Raii syn. quad. 73.</i>	<i>Aries, &c. Klein. quad. 13. 4. Fleecy.</i>
<i>Gesn. quad. 71.</i>	<i>Aries laniger cauda rotunda</i>
<i>Ovis Aries, ovis anglica mu-</i>	<i>brevi. Brisson quad. 48.</i>
<i>tica cauda scrotoque ad</i>	<i>De Buffon tom. v. tab. 1,</i>
<i>genua pendulis. Gm.</i>	<i>2.</i>
<i>Lin. 197.</i>	<i>Br. Zool. 10. Hist. quad.</i>
<i>Ovis cornibus compressis</i>	<i>I. 37.</i>
<i>lunatis. Faun. Suec. 45.</i>	

MALE.	FEMALE.	LAMB.
<i>Brit. Hwrdd. Maharen</i>	<i>Dafad</i>	<i>Oenj</i>
<i>Fren. Le Belier</i>	<i>La brebis</i>	<i>L'Agneau</i>
<i>Ital. Montone</i>	<i>Pecora</i>	<i>Aguello</i>
<i>Span. Carnero</i>	<i>Oveja</i>	<i>Cordero</i>
<i>Port. Caneiro</i>	<i>Ovelha</i>	<i>Cordeiro</i>
<i>Germ. Widder</i>	<i>Schaaf</i>	<i>Laam</i>
<i>Dut. Ram</i>	<i>Schaep</i>	<i>Lam</i>
<i>Swed. Wadur</i>	<i>Faar</i>	<i>Lamb</i>
<i>Dan. Vædder, Være</i>	<i>Faar</i>	<i>Lam, agna</i>
		<i>Gimmer Lam.</i>

IT does not appear from any of the early writers, that the breed of this animal was cultivated for the sake of the wool among the *Britons*; the inhabitants of the inland parts of this island either went entirely naked, or were

only cloathed with skins; those who lived on the sea coasts, and were the most civilized, affected the manners of the *Gauls*, and wore like them a sort of garments made of coarse wool, called *Brachæ*. These they probably had from *Gaul*, there not being the lest traces of manufactures among the *Britons*, in the histories of those times.

On the coins or money of the *Britons* are seen impressed the figures of the horse, the bull, and the hog, the marks of the tributes exacted from them by the conquerors.* The Reverend Mr. *Pegge* was so kind as to inform me that he has seen on the coins of *Cunobelin* that of a sheep. Since that is the case, it is probable that our ancestors were possessed of the animal, but made no farther use of it than to strip off the skin, wrap themselves in it, and with the wool inmost, obtain a comfortable protection against the cold of the winter season.

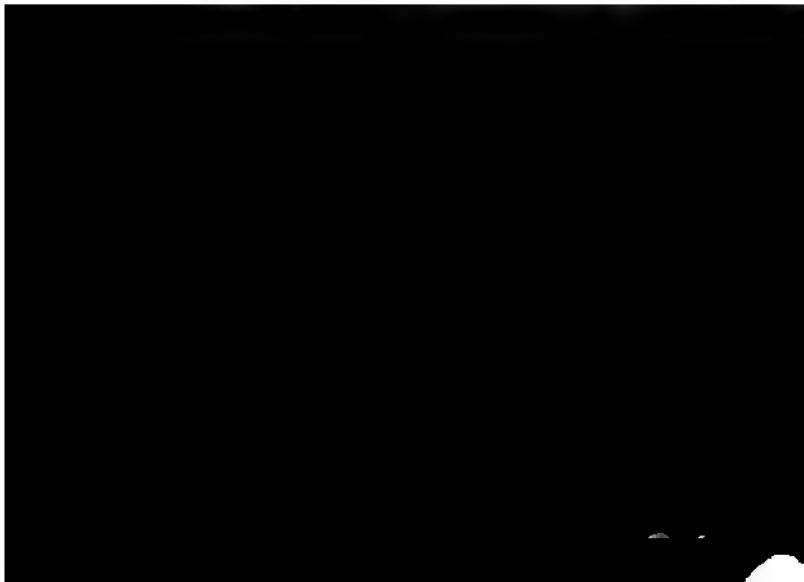


long period cultivated a breed of sheep, whose fleeces were superior to those of other countries, we still neglected to promote a woollen manufacture at home. That valuable branch of business lay for a considerable time in foreign hands, and we were obliged to import the cloth manufactured from our own materials. There seems indeed to have been many unavailing efforts made by our monarchs to preserve both the wool and the manufacture of it among ourselves: *Henry II.* by a patent granted to the weavers in *London*, directed that if any cloth was found made of a mixture of *Spanish* wool, it should be burnt by the mayor:* yet so little did the weaving business advance, that *Edward III.* was obliged to permit the importation of foreign cloth in the beginning of his reign; but soon after, by encouraging foreign artificers to settle in *England*, and instruct the natives in their trade, the manufacture increased so greatly as to enable him to prohibit the wearing foreign cloth. Still to shew the uncommercial genius of the people, the effects of this prohibition were checked by

* *Stow* 419.

another law, as prejudicial to trade as the former was salutary; this was an act of the same reign, against exporting woollen goods manufactured at home, under heavy penalties, while the exportation of wool was not only allowed but encouraged. This oversight was not soon rectified, for it appears that, on the alliance that *Edward IV.* made with the king of *Arragon*, he presented the latter with some ewes and rams of the *Coteswold* kind; a proof of their excellency, since they were thought acceptable to a monarch, whose dominions were so noted for the fineness of their fleeces.*

In the first year of *Richard III.* and in the two succeeding reigns, our woollen manufacture received some improvements;† but the grand rise of all its prosperity is to be dated from the reign of queen *Elizabeth*, when the tyranny of the duke of *Alva* in the *Netherlands*




immense manufacture we carry on at present. We have strong inducements to be more particular on the modern state of our woollen manufactures, but desist, from a fear of digressing too far; our enquiries must be limited to points that have a more immediate reference to the study of Zoology.

No country is better supplied with materials, and those adapted to every species of the clothing business, than *Great Britain*; and though the sheep of these islands afford fleeces of different degrees of goodness, yet there are none but what may be used in some branch of it. *Herefordshire*, *Devonshire*, and *Coteswold downs*, are noted for producing sheep with remarkably fine fleeces; the *Lincolnshire* and *Warwickshire* kind, which are very large, exceed any for the quantity and goodness of their wool. The former county yields the largest sheep in these islands, where it is no uncommon thing to give fifty guineas for a ram, and a guinea for the admission of a ewe to one of the valuable males; or twenty guineas for the use of it for a certain number of ewes during one season.* *Suffolk* also breeds a

* So much attention, since the period of the first edi-

jaws of an ox, with teeth thickly incrustated with a gold colored substance; and the same might have happened to those of sheep had they fed on the same grounds, which were in the valley beneath the house.

Besides the fleece, there is scarcely any part of this animal but what is useful to man-kind. The flesh is a delicate and wholesome food. The skin dressed, forms different parts of our apparel, and is used for covers of books. The entrails, properly prepared and twisted, serve for strings for various musical instruments. The bones calcined (like other bones in general) form materials for tests for the refiner. The milk is thicker than that of cows, and consequently yields a greater quantity of butter and cheese; in some places it is so rich, that it will not produce the cheese without a mixture of water to make it part




we may with *Columella* consider it in one sense, as the first of the domestic animals. *Post majores quadrupedes ovilli pecoris secunda ratio est; quæ prima sit si ad utilitatis magnitudinem referas. Nam id præcipue contra frigoris violentiam protegit, corporibusque nostris liberaliora præbet velamina; et etiam elegantium mensas jucundis et numerosis dapibus exornat.**

The sheep as to its nature, is a most innocent, mild and simple animal, and conscious of its own defenceless state, remarkably timid: if attacked when attended by its lamb, it will make some shew of defence, by stamping with its feet, and pushing with its head: it is a gregarious animal, is fond of any jingling noise, for which reason the leader of the flock has in many places a bell hung round its neck, which the rest will constantly follow.

It is subject to many diseases: some arising from insects which deposit their eggs in different parts of the animal; others are caused by their being kept in wet pastures; for as the sheep requires but little drink, it is naturally fond of a dry soil. The dropsy, vertigo (the

* *De re rustica, lib. vii. c. 2.*

pendro of the *Welsh*) the pthisick, jaundice, and worms in the liver,* annually make great havoc among our flocks: for the first disease, the shepherd finds a remedy by turning the infected into fields of broom; a plant which has been also found to be very efficacious in the same disorder among the human species. The sheep is also infested by different sorts of insects; like the horse it has its peculiar *Oestrus* or Gadfly, which deposits its eggs above the nose in the frontal sinuses; when those turn into maggots they become excessively painful, and cause those violent agitations in which we so often see the animal. The *French* shepherds make a common practice of easing the sheep, by trepanning and taking out the maggot; this practice is sometimes used by the *English* shepherds, but not always with the same success. Besides these insects, the sheep



GENUS IV. GOAT.

HORNS bending backwards and almost close
at their base.

MALE generally bearded.

Raii syn. quad. 77.

Meyer's an. i. Tab. 68.

Charlton ex. 9.

Klein quad. 15.

Gesn. quad. 266. 268.

De Buffon tom. v. 59.
tab. 8. 9.

Hircus cornibus interioribus cul- 5. *Domestic.*

tratis, exterius rotundatis,
infra carinatis, arcuatis.

Brisson quad. 38.

Capra Hircus. Gm. Lin. 192.

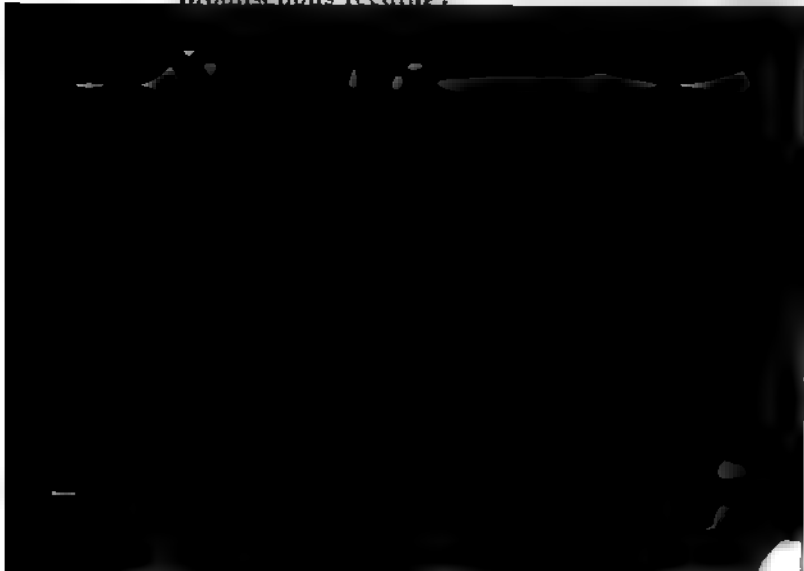
Capra cornibus carinatis ar-
cuatis, Faun. Suec. 44.

Br. Zool. 13. Hist. quad. p.
60. Arct. Zool. i. 17.

	MALE.	FEMALE.	KID.
<i>Brit.</i>	Bweh	Gafr	Mynn
<i>Fren.</i>	Le Bouc	La Chevre	Chevreaux
<i>Ital.</i>	Becco	Capra	Capretto
<i>Span.</i>	Cabron	Cabra	Cabruto
<i>Port.</i>	Cabram	Cabra	Cabruto
<i>Germ.</i>	Bock	Geisz	Bocklein
<i>Dut.</i>	Bok	Giyt	
<i>Swed.</i>	Bock	Geet	Kiidh
<i>Dan.</i>	Buk, Geedebuk	Geed	Kid.

THE goat is the most local of any of our
domestic animals, confining itself to the moun-

tanous parts of these islands: his most beloved food are the tops of the boughs, or the tender bark of young trees, on which account he is so prejudicial to plantations, that it would be imprudent to draw him from his native rocks, except some method could be devised to obviate this evil. We have been informed, that there is a freeholder in the parish of *Trawsfynydd*, in *Meirionethshire*, who hath, for several years past, broken the teeth of his goats short off with a pair of pincers, to preserve his trees. This practice has certainly efficacy sufficient to prevent the mischief, and may be recommended to those who keep them for their singularity: but ought by no means to be encouraged, when those animals are preserved for the sake of their milk, as the great salubrity of it as a medicine arises from their promiscuous feeding.




longest and thickest; a good skin well haired is sold for a guinea, though a skin of bad hue, and so yellow as to baffle the barber's skill to bleach, will not fetch above eighteen-pence, or two shillings.

The *Welsh* goats are far superior in size, and in length and fineness of hair, to those of other mountainous countries. Their usual color is white: those of *France* and of the *Alps* are short-haired, reddish, and their horns small. We have seen the horns of a *Cambrian* he-goat three feet two inches long, and measuring three feet from tip to tip.

The suet of the goat is in great esteem, as well as the hair. Many of the inhabitants of *Caernarvonshire* suffer these animals to run wild on the rocks during winter as well as summer, and kill them in *October*, for the sake of their fat, either by shooting them with bullets, or running them down with dogs like deer. The goats killed for this purpose, are about four or five years old. Their suet will make candles, far superior in whiteness and goodness to those made from that of the sheep or the ox, and accordingly brings a much greater price in the market: nor are the horns

without their use, the country people making of them excellent handles for tucks and pen-knives. The skin is peculiarly well adapted for the glove manufactory, especially that of the kid: abroad it is dressed and made into stockings, bed-ticks, bolsters,* bed-hangings, sheets, and even shirts. In the army it covers the horseman's arms, and carries the foot-soldier's provisions. As it takes a dye better than any other skin, it was formerly much used for hangings in the houses of people of fortune, being susceptible of the richest colors; and when flowered and ornamented with gold and silver, became an elegant and superb article of furniture.

The flesh is of great use to the inhabitants of the country where it resides; and affords a cheap and plentiful provision in the winter months, when the kids are brought to market.



this by the natives is called *Cóch'yr roden*, or hung venison. The meat of a castrated goat of six or seven years old, (which is called *Hyfr*,) is reckoned the best: being generally very sweet and fat. This makes an excellent pasty, goes under the name of rock venison, and is little inferior to that of the deer. Thus nature provides, even on the tops of high and craggy mountains, not only necessities, but delicacies for the inhabitants.

The milk of the goat is sweet, nourishing and medicinal: it is an excellent succedaneum for ass's milk, and has (with a tea-spoonful of hartshorn drank warm in bed in the morning, and at four o'clock in the afternoon, and repeated for some time) been a cure for the phthisic. In some of the mountanous parts of *Scotland* and *Ireland*, the milk is made into whey, which has done wonders in this and other cases, where coolers and restoratives are necessary: and to many of those places, there is as great a resort of patients of all ranks, as there is in *England* to the *Spas* or Baths. It is not surprizing that the milk of this animal is so salutary, as it brouzes only on the tops, tendrils and flowers of the mountain shrubs, and

medicinal herbs, rejecting the grosser parts. The blood of the he-goat dried, is a great receipt in some families for the pleurisy and inflammatory disorders.*

Cheese made of goats milk, is much valued in some of our mountainous countries, when kept to a proper age; but has a peculiar taste and flavor.

The rutting season of these animals, is from the beginning of *September* to *November*; at that time the males drive whole flocks of the females continually from place to place, and fill the atmosphere around them with their strong and ungrateful odor; which, though as disagreeable as *assa fatida* itself, may be conducive to prevent many distempers, and to cure nervous and hysterical ones. Horses are imagined to be much refreshed with it; on



only two tests, they bear generally but two young, sometimes three, and in good warm pastures there have been instances, though rare, of their bringing four at a time: both young and old are affected by the weather: a rainy season makes them thin; a dry sunny one makes them fat and blythe: their excessive venery prevents longevity, for they seldom live in our climate above eleven or twelve years.

These animals climb, with amazing swiftness and safety, up the most rugged rocks, and ascend the most dangerous places: they can stand unmoved on the highest precipices, and so balance their centre of gravity, as to fix themselves in such situations with security and firmness; so that we seldom hear of their breaking their necks, or falling. When two are yoked together, as is frequently practised, they will, as if by consent, take large and hazardous leaps, yet so well time their mutual efforts, as rarely to miscarry in the attempt.

The origin of the domestic goat may be derived from the *Steinboc*, *Ibex* or wild goat,*

* *Hist. quad.* No. 15.

now found only in the *Alps* and in *Crete*, and also from the *Caucasan* goat,† which inhabits the loftiest and most rude points of *Caucasus*, the inhospitable hills of *Laar* and *Khoraxan* in *Persia*, and, according to *Monardus*, is also found in *Africa*; it may likewise have formerly been a native of the *Alps* and of *Crete*.

* *Hist. quad.* No. 16.

GENUS V. DEER.

Horns upright, solid, branching, annually deciduous.

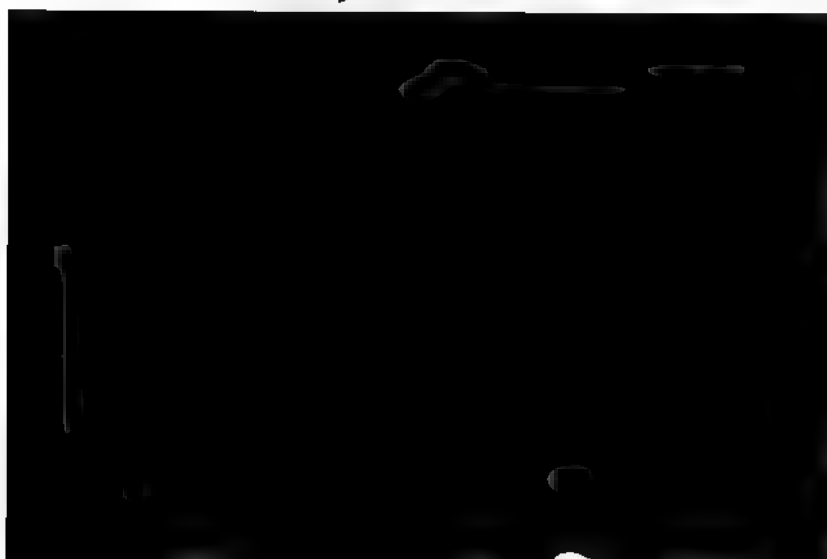
Cervus. Raii syn. quad. 84. Cervus cornibus teretibus ad 6. Stag. Charlt. ex. 11. latera incurvis. Brisson Meyer's an. Tab. 22. quad. 58. Gesner quad. 326. Cervus Elaphus. Gm. Lin. 176. Grew's Museum, 21. C. cornibus ramosis teretibus recurvatis. Faun. Suec. 40. De Buffon, tom. vi. 63. C. nobilis. Klein. quad. 23. Tab. 9, 10. Br. Zool. 15. Hist. quad. p. 114.

	STAG.	HIND.	YOUNG, or CALF.
<i>Brit.</i>	Carw	Ewig	Elain
<i>Fren.</i>	Le Cerf	La Biche	Faon
<i>Ital.</i>	Cervio	Cervia	
<i>Span.</i>	Ciervo	Cierva	
<i>Port.</i>	Cervo	Cerva	
<i>Germ.</i>	Hirtz, Hirsch	Hind	Hinde kalb
<i>Dutch.</i>	Hart	Hinde	
<i>Swed.</i>	Hiort, Kronhiort	Hind	
<i>Dan.</i>	Kronhiort	Hind	Kid, or Hind kalv.

7. *Fallow*. *Platycerata*. *Plinii*, lib. xi. c. 37. *Cervus cornuum unica et altiore summitate palmata. Brisson quad. 82.*
Eurycerata. *Oppian* Cy. neg. lib. 11. lin. 293. *Cervus Dama. Cervus cornibus ramosis recurvatis compressis: summitatibus palmatis. Gm. Lin. 178. Faun. Suec. 82. Br. Zool. 15. Hist. quad. p. 113.*
Fallow deer, or buck; cervus platyceros. Rait syn. quad. 85.
Dama vulgaris. Gesner quad. 307. Meyer's an. tom. i. tab. 71. De Buffon. tom. vi. 161. tab. 27, 28. Cervus pulmatius. Klein. quad. 25.

	Buck.	Dox.	Fawn.
<i>Brit.</i>	Hydd	Hyddes	Elain
<i>Fren.</i>	Le Dain	La Dain.	Faon
<i>Ital.</i>	Daino		Cerbiatto
<i>Span.</i>	Gamo, Corza		Venadito
<i>Port.</i>	Corza		Vendo
<i>Germ.</i>	Dambirsch		
<i>Sued.</i>	Dof, Dof hiort		
<i>Dan.</i>	Daae Dijn		

AT first, the beasts of chase had this whole

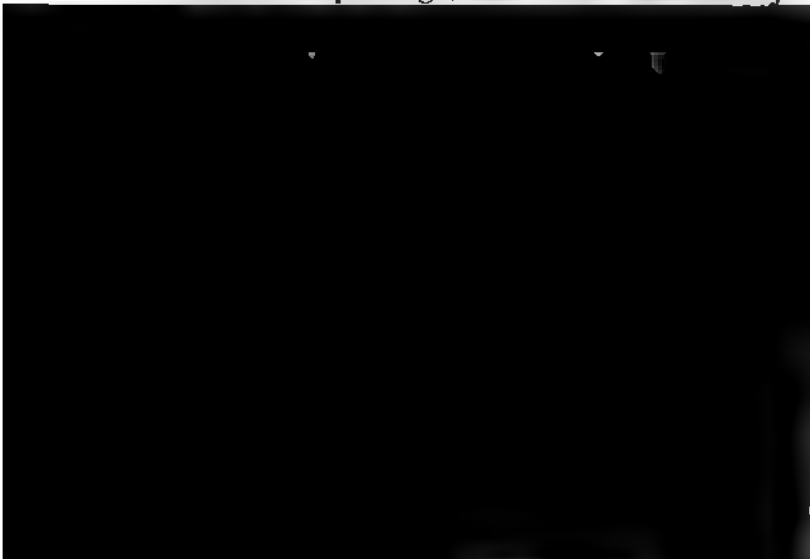


the great; their active, but uncultivated minds, being susceptible of no pleasures but those of a violent kind, such as gave exercise to their bodies, and prevented the pain of thinking. As the *Saxon* kings only appropriated those lands to the use of forests which were unoccupied, no individuals received an injury: but when the conquest had settled the *Norman* line on the throne, this passion for the chace was carried to an excess, which involved every civil right in a general ruin; it superseded the consideration of religion even in a superstitious age: the village communities, nay, even the most sacred edifices were turned into one vast waste, to make room for animals, the objects of a lawless tyrant's pleasure. The New Forest in *Hampshire* is too trite an instance to be dwelt upon: sanguinary laws were enacted to preserve the game, and in the reigns of *William Rufus*, and *Henry I.* it was less criminal to destroy one of the human species than a beast of chace.* Thus it continued while the

* An ancient historian speaks thus of the penalties incurred; *Cervum vel capreolum capienti, oculi eruebantur. Amabat enim ferus Rex, feras, quasi pater ferarum, Matt. Paris. 9.*

Norman line filled the throne; but when the *Saxon* line was restored under *Henry II.* the rigor of the forest laws was immediately softened.

When our barons began to form a power, they claimed a vast, but more limited tract for a diversion, the *English* were always fond of. They were very jealous of any encroachments on their respective bounds, which were often the cause of deadly feuds; such a one gave cause to the fatal day of *Chevy-chace*, a fact, which though recorded only in a ballad, may, from what we know of the manners of the times, be founded on truth; not that it was attended with all the circumstances the author of that natural, but heroic composition hath given it, for on that day neither a *Percy* or a *Douglas* fell: here the poet seems to have claimed his privilege, and mixed with his fray



nity. The vast tracts of land before dedicated to hunting, were then contracted, and in proportion as the useful arts gained ground, either lost their original destination, or gave rise to the invention of Parks.* Liberty and the arts seem coeval, for when once the latter got footing, the former protected the labors of the industrious from being ruined by the licentiousness of the sportsman, or being devoured by the objects of his diversion; for this reason, the subjects of a despotic government still experience the inconveniences of vast wastes, and forests, the terrors of the neighbouring husbandmen;† while in our well-regulated monarchy, very few chaces remain: we still indulge ourselves in the generous pleasure of hunting, but confine the deer-kind to parks, of which *England* boasts of more than any

* The largest park in *England*, about the year 1780, was that belonging to the Duke of *Ancaster*, at *Grims-thorpe*, which, it is said, contained not less than six thousand head of fallow-deer, and is annually enlarging. There is near it another park containing two or three hundred head of stags and hinds. M. T.

† In *Germany* the peasants are often obliged to watch their grounds the whole night, to preserve the fences and corn from being destroyed by the deer.

other kingdom in *Europe*. Our equal laws allow every man his pleasures, but confine them within such bounds, as prevents them from being injurious to the meanest of the community. Before the reformation, our prelates seem to have guarded sufficiently against the want of this amusement, the see of *Norwich* in particular, being possessed about that time of thirteen parks.* They seem to have forgot good king *Edgar's* advice, *Docet-ur etiam ut sacerdos non sit venator neque accipitrarius neque potator, sed incumbat suis libris acut ordinem ipsius decet.*†

It was customary to salt the venison for preservation, like other meat. *Rymer* preserves a warrant of *Edward III.* ordering sixty deer to be killed for that purpose.


The stag and buck agree in their nature; but the latter being more tender is easier

part with the species. Stags are still found wild in the highlands of *Scotland*, in herds of four or five hundred together, ranging at full liberty over the vast hills of the north. Some grow to a great size: when I was at *Invercauld* Mr. *Farquharson* assured me that he knew an instance of one that weighed eighteen stone Scots, or three hundred and fourteen pounds, exclusive of the entrails, head and skin. Formerly the great highland chieftains used to hunt with the magnificence of an eastern monarch, assembling four or five thousand of their clan, who drove the deer into the toils, or to the station their lairds had placed themselves in; but as this pretence was frequently used by them to collect their vassals for rebellious purposes, an act was passed prohibiting any assemblies of this nature. Stags are likewise met with on the moors that border on *Cornwall* and *Devonshire*, and in *Ireland* on the mountains of *Kerry*, where they add greatly to the magnificence of the romantic scenery of the lake of *Killarny*.

The stags of *Ireland* during its uncultivated state, and while it remained an almost boundless tract of forest, had an exact agreement in

habit with those which range at present through the wilds of *America*. They were less in body, but very fat: and their horns of a size far superior to those of *Europe*, but in form agreed in all points. Old *Giraldus* speaks with much precision of those of *Ireland*, *Cervos præ nimia pinguedine minus fugere prævalentes, quanto minores sunt corporis quantitate, tanto præcellentius efferuntur, capitis et cornuum dignitate.**

[The rutting time of the old stags, begins the latter end of *August* or beginning of *September*, and ends about the 20th of that month: that of the next age, begins about the 10th of *September*, and ends the beginning of *October*: the younger stags are in rut from about the 20th of *September* till the 15th of *October*, after whom none but the prickets are in rut, and the whole season terminates by *November*. The




age to engender at eighteen months. The hind carries her young rather more than eight months, and produces mostly one, sometimes two at a birth. Stags seldom live longer than thirty or thirty five years, although many authors have attributed to them a much greater degree of longevity. The fallow-deer does not begin to rut till near three weeks after the stags, and exactly in the same order, the old bucks first and the prickets last. They also drop their horns later in the same proportion.]
M. T.

We have in *England* two varieties of fallow-deer which are said to be of foreign origin: the beautiful spotted kind, and the very deep brown sort, that are now so common in several parts of this kingdom. These were introduced here by king *James I.* out of *Norway*,* where he passed some time when he visited his intended bride, *Anne of Denmark*.† He observed their hardiness, and that they

* This we relate on the authority of Mr. *Peter Collinson*.

† One of the *Welsh* names of this animal (*Geifr Danys*, or *Danish* goat) implies that it was brought from some of the *Danish* dominions. *Ed. Llwyd. Ph. tr. No. 334.*

could endure, even in that severe climate, the winter without fodder. He first brought some into *Scotland*, and from thence transported them to his chaces of *Ensfeld* and *Epiping*, to be near his palace of *Theobalds*; for it is well known, that monarch was in one part of his character, the *Nimrod* of his days, fond to excess of hunting, that image of war, although he detested the reality. No country produces the fallow-deer in quantities equal to *England*. In *France* they are scarcely known, but are sometimes found in the north* of *Europe*. In *Spain* they are extremely large. They are met with in *Greece*, the *Holy Land*,† and in *China*;‡ but in every country except our own are in a state of nature, unconfined by man. They are not natives of *America*, for the deer known in our colonies by that name are a distinct species,



known to every one; and the horns of the stag are of great use in mechanics; they, as well as the horns of the rest of the deer kind, being excessively compact, solid, hard and weighty, and make excellent handles for couteaus, knives, and several other utensils. They abound in *ammonia*, which is the basis of the spirit of Hartshorn; and the remains (after the salts are extracted) being calcined, become a valuable astringent in fluxes, which is known by the name of burnt Hartshorn. Besides these uses in mechanics and medicine, there is an instance in *Giraldus Cambrensis*, of a countess of Chester, who kept milch hinds, and made cheese of their milk, some of which she presented to archbishop Baldwin, in his itinery through *Wales*, in the year 1188.*

* *Girald. Camb. Itin.* p. 216.

8. *Roc. Aquæ, Aristotelis* de Part. lib. iii. c. 2. *Cervus cornibus teretibus erectis. Brisson quad. 61.*
- Iorcas, Dorcas, Oppian Cy. neg.* lib. ii. lin. 296. 315. *De Buffon, Tom. vi. 289. Tab. 32, 33.*
- Caprea, Plinii,* lib. xi. c. 37. *Cervus minimus, Klein quad. 24.*
- Capreolus Vulgo. Rait syn. quad. 89.* *Cervus Capreolus, Gm. Lin. 160.*
- Cand. Brit. ii. 771.* *C. Cornibus ramosis teretibus erectis, summitate bifida, Faun. Succ. 43.*
- Meyer's an. ii. Tab. 73.* *Br. Zool. 18. Hist. quad. p. 120. Tour in Scotland, 288. Tab. xiv. Arct. Zool. 137.*
- Capreolus, Sib. Scot. pars 3. 9.*
- Caprea, Capreolus, Dorcas. Gesner quad. 296.*
- Meriet pinus 166.*

Brit. Iwrch, fœm. Iyrchell Port. Cabra montes
Fren. Le Chesreuil Ger. Rehbock, fœm.



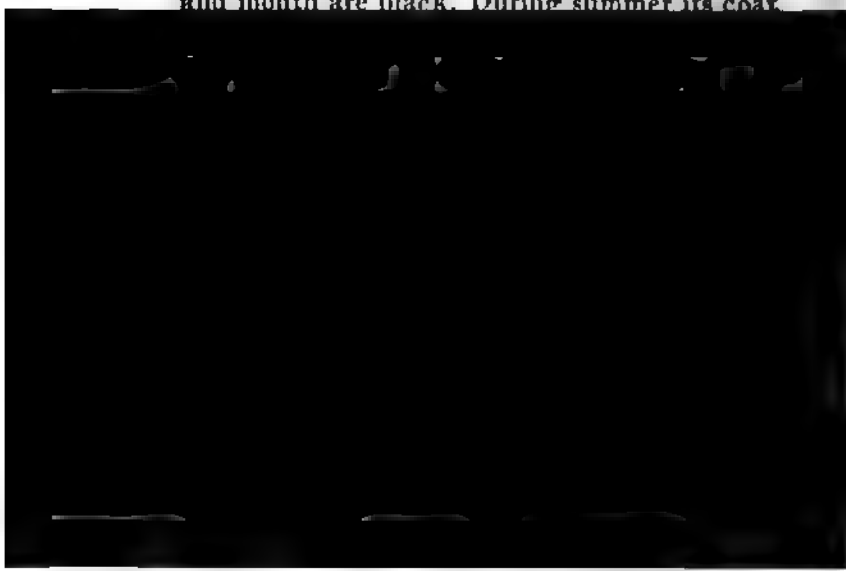
and in *Scotland*, but at present the species no longer exists in any part of *Great Britain*, except in the *Scottish* highlands. According to *Dr. Mouffet*, it was found in *Wales* as late as the reign of *Queen Elizabeth*, and in great plenty in the *Cheviot* hills according to *Leland* in that of *Henry VIII.** In *France* they are more frequent; they are also found in *Italy*, *Sweden*, and *Norway*; and in *Siberia* in *Asia*.† The first that are met with in *Great Britain* are in the woods on the south side of *Loch Rannoch*, in *Perthshire*: the last in those of *Langwal*, on the southern borders of *Cathness*; but they are most numerous in the beautiful forests of *Invercauld*, in the midst of the *Grampian* hills. They are unknown in *Ireland*.

This is one of the lest of the deer kind, be- *Description*
ing only three feet nine inches long, two feet

* This species was not confined to the northern parts exclusively; for the editor of the *Lond. edit. 1812*, was informed, "that seven or eight specimens of the horns of the roebuck were discovered in the peat beds near *Romsey*, in *Hampshire*; a proof, that at some remote period, this animal inhabited the southern part of the kingdom." And also, that "a complete head of a beaver with the teeth entire, was found in the same place."—*Ed.*

† *Bell's Travels*.

three inches high before, and two feet seven behind: the weight is from 50 to 60lb. The horns are from eight to nine inches long, upright, round, and divided into only three branches; their lower part is sulcated lengthways and extremely rugged; of this part is made handles for cut-throats, knives, &c. The horns of a young buck in its second year are quite plain; in its third year a branch appears; in the fourth its head is complete. The body is covered during winter with very long hair, well adapted to the rigor of the highland air; the lower part of each hair is ash-color, near the end is a narrow bar of black, and the points are yellow. The hairs on the face are black, tipped with ash-color; the ears are long; their insides of a pale yellow, and covered with long hair; the spaces bordering on the eyes and mouth are black. During summer its coat



is very elegant, and formed for agility.

These animals do not keep in herds like other deer, but only in families; they bring two fawns at a time, which the female is obliged to conceal from the buck while they are very young. They engender at the age of eighteen months, and the doe goes with young five months. They live twelve or fifteen years. The flesh of this creature is reckoned a delicate food.

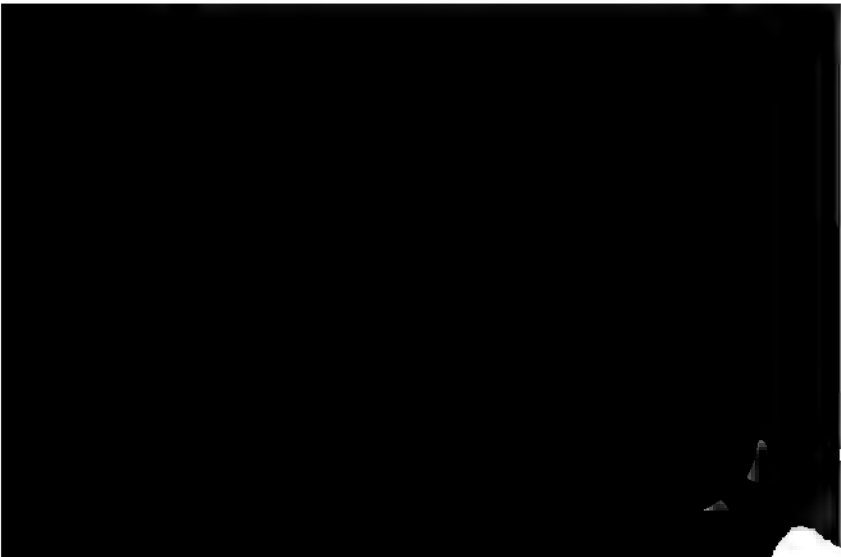
It is a tender animal, incapable of bearing great cold. *M. de Buffon* tells us that in the hard winter of 1709, the species in *Burgundy* was almost destroyed, and many years elapsed before it was restored again. I was informed in *Scotland*, that it is very difficult to rear the fawns; it being computed that eight out of ten of those that are taken from their parents die.

Wild roes during summer feed on grass, and are very fond of the *rubus saxatilis*, called in the highlands the *roebucka* berry; but in winter time, when the ground is covered with snow, they brouze on the tender branches of fir and birch.

In the old *Welsh* laws, a roebuck was valued

at the same price as a she goat; a stag at the price of an ox; and a fallow-deer was esteemed equal to that of a cow, or, as some say, an he goat.*

It will not be foreign to the present subject, *Fossil* to mention the vast horns frequently found in *horns*. *Ireland*, and others sometimes met with in our own kingdom. The latter are evidently of the stag kind, but much stronger, thicker, heavier, and furnished with fewer antlers than those of the present race; of those some have been found on the sea-coast of *Lancashire*,† and a single horn was dug a few years ago out of the sands near *Chester*. Those found in *Ireland* must be referred to the elk kind, but of a species different from the *European*, being provided with brow antlers which that wants: neither are they of the *Moose deer* or *American*, which entirely agrees with the elk of *Europe*,



are near twelve feet between tip and tip.* Not the faintest account (traditional or historical) is left of the existence of these animals in our kingdom, so that they may possibly be ranked among those remains which fossilists distinguish by the title of *diluvian*.

Mr. *Graham*, factor to the *Hudson's Bay* company, once gave me hopes of discovering the living animal. He informed me that he had received accounts from the *Indians* who resort to the factories, that a deer is found about seven or eight hundred miles west of *York fort*, which they call *Waskessen*, and which they say is vastly superior in size to the common Moose; but as yet nothing has transpired relating to so magnificent an animal. The difference of size between the modern Moose and the owners of the fossil horns may be estimated by the following account. The largest horns of the *American* Moose ever brought over, are only thirty-two inches long, and thirty-four between tip and tip. The

* A pair of this size is preserved at Sir *Patrick Bellew's*, Bart. in the county of *Louth*. The great difference between the Moose horns and the Fossil is shewn in Plate XVII. and XX. of my *History of Quadrupeds*.

thiness is an idea merely relative to ourselves. We form a partial judgment from our own sensations, and overlook that wise maxim of Providence, that every part of the creation should have its respective inhabitants. By this œconomy of nature, the earth is never overstocked, or any part of the creation useless. This observation may be exemplified in the animal before us; the hog alone devouring what is the refuse of all the rest, and contributing not only to remove what would be a nuisance to the human race, but also converting the most nauseous offals into the richest nutriment: for this reason its stomach is capacious, and its gluttony excessive; not that its palate is insensible to the difference of eatables, for where it finds variety, it will reject the worst with as distinguishing a taste as other quadrupeds.*

This animal has, not unaptly, been compared



except in removing that filth which other animals reject: his more than common brutality, urges him to devour even his own off-spring. All other domestic quadrupeds shew some degree of respect to mankind, and even a sort of tenderness for us in our helpless years, but this animal will devour infants, whenever it has opportunity.

The parts of the hog are finely adapted to its way of life. As its method of feeding is by turning up the earth with its nose for roots of different kinds, so nature has given it a more prone form than other animals; a strong brawny neck; eyes small, and placed high in the head; a long snout, a nose callous and tough, and a quick sense of smelling to trace out its food. Its intestines have a strong resemblance to those of the human species; a circumstance that should mortify our pride. The external form of its body is very unwieldy; yet, by the strength of its tendons, the wild boar (which is

domestic animal chuses, or rejects: and it is found that the hog eats but 72, and refuses 171 plants.

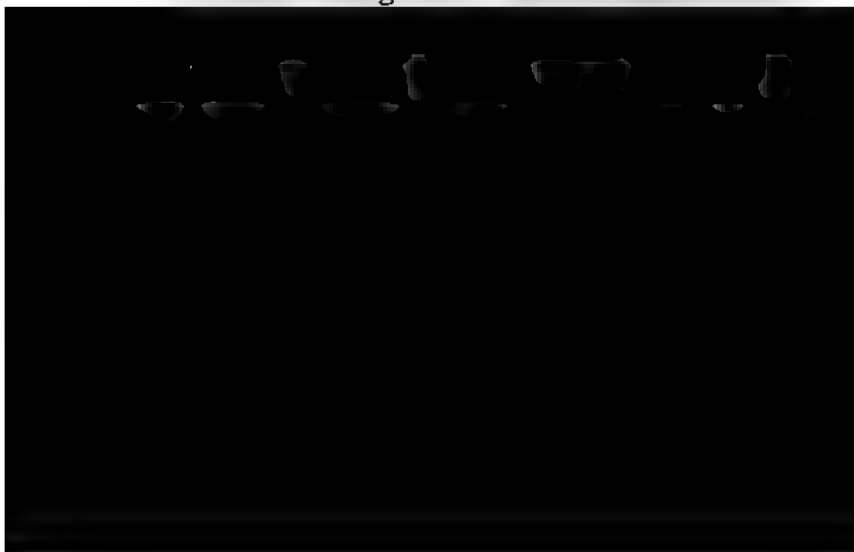
The Ox eats 276, rejects 218.

Goat 449, 126.

Sheep 387, 141.

Horse 262, 212. *Amæn. Acad. ii. 203.*

only a variety of the common kind) is enabled to fly from the hunters with amazing agility: the back toe on the feet of this animal prevents its slipping while it descends declivities, and must be of singular use when it is pursued: yet, notwithstanding its powers of motion, it is by nature stupid, inactive, and drowsy; much inclined to increase in fat, which is disposed in a different manner from other animals, and forms a regular coat over the whole body. It is restless at a change of weather, and in certain high winds is so agitated as to run violently, screaming horribly at the same time; it is fond of wallowing in the dirt, either to cool its surfeited body, or to destroy the lice, ticks, and other insects with which it is infested. Its diseases generally arise from intemperance; measles, impostumes, and scrophulous complaints are reckoned among them. *Linnaeus* observes that



hog is an article of the first importance to a naval and commercial nation, for it takes salt better than any other kind, and consequently is capable of being preserved longer. The lard is of great use in medicine, being an ingredient in various sorts of plaisters, either pure, or in the form of unguent; and the bristles are formed into brushes of several kinds.

This animal has been applied to an use in this island, which seems peculiar to *Minorca* and the part of *Murray* which lies between the *Spey* and *Elgin*. It has been there converted into a beast of draught; for I have been assured by a minister of that country, eye witness to the fact, that he had on his first coming into his parish seen a cow, a sow, and two *Troques* (young horses) yoked together, and drawing a plough in a light sandy soil, and that the sow was the best drawer of the four. In *Minorca* the ass and the hog are common help-mates, and are yoked together in order to turn up the land.

The wild-boar was formerly a native of our country, as appears from the laws of *Howel dda*,* who permitted his grand huntsman to

* *Leges Wallicæ*. 41.

chase that animal from the middle of *November* to the beginning of *December*. *William* the Conqueror punished with the loss of their eyes, those who were convicted of killing the wild-boar, the stag, or the roebuck;* and *Fitz-Stephen* tells us, that the vast forest which in his time grew on the north side of *London*, was the retreat of stags, fallow-deer, wild-boars, and bulls. *Charles I.* turned out wild-boars in the *New Forest, Hampshire*, but they were destroyed in the civil wars.

* *Leges Saron.* 202.

DIV. II. SECT. I. DIGITATED.

TEETH cutting six in each jaw: Canine two in each jaw, large, distant from the cutting teeth.

RAPACIOUS, carnivorous,

GENUS VII. DOG.

TOES five before, four behind.

CLAWS blunt,

VISAGE long.

<i>Canis, Raii syn. quad.</i> 175.	<i>Klein. quad.</i> 63.	10. <i>Faithful.</i>
<i>Charlton ex.</i> 26.	<i>Canis familiaris. Gm. Lin.</i>	
<i>Merret pinax,</i> 168.	65.	
<i>Gesner quad.</i> 160, 249, 250.	<i>Canis cauda recurva. Faun.</i>	
<i>Canis domesticus. Brisson</i>	<i>Succ.</i> 5.	
<i>quad.</i> 170.	<i>Br. Zool.</i> 23. <i>Hist. quad,</i>	
<i>De Buffon. tom. v. p.</i> 185.	<i>p.</i> 235.	
<i>Brit. Ci, fæm. Gast</i>	<i>Germ. Hund</i>	
<i>Fren. Le Chien</i>	<i>Dut. Hond</i>	
<i>Ital. Cane</i>	<i>Swed. Hund</i>	
<i>Span. Perro</i>	<i>Dan, Hund, fæm. Tæve.</i>	
<i>Port. Cam</i>		

DR. Caius, an *English* physician, who flourished in the reign of queen *Elizabeth*, has left

among several other tracts relating to natural history, one written expressly on the species of *British dogs*: they were composed for the use of his learned friend *Gesner*, with whom he kept a strict correspondence, and whose death he laments in a very elegant and pathetic manner.

Besides a brief account of the variety of dogs then existing in this country, he has added a systematic table of them: his method is so judicious, that we shall make use of the same, explain it by a brief account of each kind, and point out those which are no longer in use among us.

SYNOPSIS OF BRITISH DOGS,

ds.	hace.	Hounds,	{ Terrier
			{ Harrier
			{ Blood hound

II. Farm Dogs.	}	Shepherd's dog Mastiff, or ban dog
III. Mon- grels.	}	Wappe Turnspit Dancer.


The first variety is the *Terrarius* or Terrier, which takes its name from its subterraneous employ: being a small kind of hound, used to force the fox, or other beasts of prey, out of their holes; and, in former times, rabbits out of their burrows into nets.

The *Leverarius*, or Harrier, is a species well known at present; it derives its name from its use, that of hunting the hare; but under this head may be placed the fox-hound, which is only a stronger and fleeter variety, applied to a different chace.*

The *Sanguinarius*, or Bloodhound, or the

* Prince *Gryffydd ap Cynan* (who began his reign in the year 1079) divided hunting into three kinds: the first and noblest sort was the *Helfa ddolef*, which is hunting for the melody of the cry, or notes of the pack: the second sort was the *Helfa gyfartha*, or hunting when the animal stood at bay: the last kind was the *Helfu gyffredin*, i. e. common hunting; which was no more than the right any person had, who happened accidentally to come in at the death of the game, to claim a share. *Lewis's Hist. of Wales*, 56.

Slouthound of the *Scots*, was a dog of great use, and in high esteem with our ancestors: its employ was to recover any game that had escaped wounded from the hunter, or been killed and stolen out of the forest. It was remarkable for the acuteness of its smell, tracing the lost beast by the blood it had spilt; from whence the name is derived. This species could, with the utmost certainty, discover the thief by following his footsteps, let the distance of his flight be ever so great, and through the most secret and thickest coverts: nor would it cease its pursuit, till it had taken the felon. It was likewise used by *Wallace* and *Bruce* during the civil wars. The poetical historians of the two heroes, frequently relate very curious passages on this subject; of the service these dogs were of to their masters, and the escapes they had from those of the



The true bloodhound was large, strong, muscular, broad breasted, of a stern countenance, of a deep tan-color, and generally marked with a black spot above each eye.

The next division of this species of dogs, comprehends those that hunt by the eye, and whose success depends either upon the quickness of their sight, their swiftness, or their subtlety.

The *Agasæus*, or Gazehound, was the first: it chaced indifferently the fox, hare, or buck. It would select from the herd the fattest and fairest of the deer, pursue it by the eye, and if lost for a time, recover it again by its singular distinguishing faculty; should the beast rejoin the herd, this dog would fix unerringly on the same. This species is now lost, or at least unknown to us.

It must be observed that the *Agasæus* of Dr. Caius, is a very different species from the *Agasseus* of Oppian, for which it might be mistaken from the similitude of names: this he describes as a small kind of dog, peculiar to *Great Britain*; and then goes on with these words;

Γυρὸν, ἀσαφέστατον, λαιώτριχον, ὄμμασι νωθὸν.

Curvum, macilentum, hispidum, oculis pigrum.

what he adds afterwards, still marks the difference more strongly;

Ῥῖνος δ' αὖτις μάλα οὐκ ἀνίσταται τοῖς ἑσπερίοις.

Naribus autem longè præstantissimus est esopæus.

From *Oppian's* whole description, it is plain he meant our Beagle.*

The next kind is the *Leporarius*, or Grehound. Dr. *Caius* informs us, that it takes its name *quod præcipui gradus sit inter canes*; the first in rank among dogs: that it was formerly esteemed so, appears from the forest laws of king *Canute*, who enacted, that no one under the degree of a gentleman should presume to keep a gre-hound; and still more strongly from an old *Welsh* saying; *Wrth ci Walch, ci Farch, a'i Filgi, yr adwaenir Bonheddig*: which signifies, that you may know a gentleman by his



in *Flint* castle, his favourite gre-hound immediately deserted him, and fawned on his rival *Bolingbroke*; as if he understood, and foresaw the misfortunes of the former. The story is so singular, that we give as a note the words of the historian.*

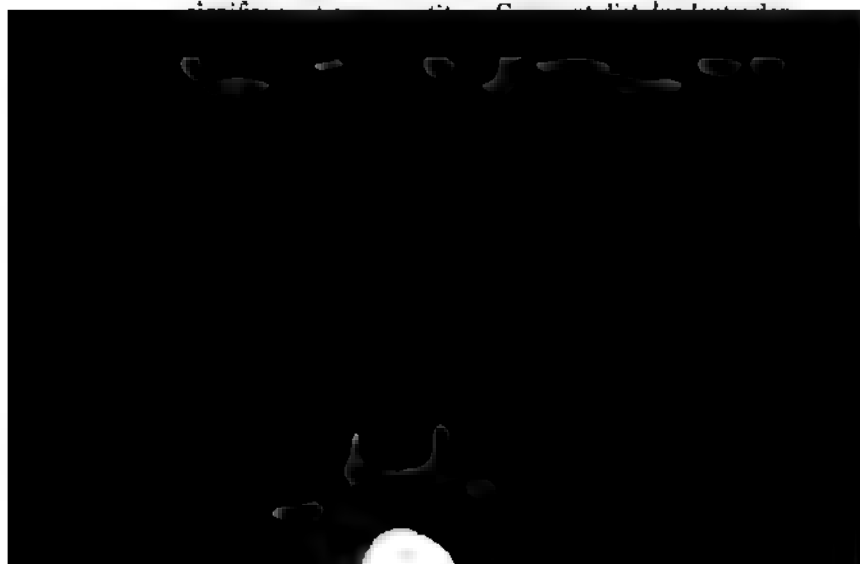
The variety called the *Highland* gre-hound, and now become very scarce, is of a very great size, strong, deep chested, and covered with long and rough hair. This kind was much esteemed in former days, and used in great numbers by the powerful chieftains in their magnificent hunting matches. It had as sagacious nostrils as the Blood-hound, and was as fierce. This seems to be the kind *Boethius*.

* Le Roy *Richard* avoit ung levrier lequel on nommoit *Math*, tres beau levrier oultre mesure, et ne vouloit ce chien cognoistre nul homme hors le Roi, et quand le Roy vouloit chevaucher, celluy qui lavoit en garde le laissoit aller, et ce levrier venoit tantost devers le Roy le festoyer ce luy mettoient incontinent quil estoit eschappé les deux pieds sur les epaules. Et adoncques advint que le Roy et le conte *Derby* parlans ensemble en la place de la court dudit chasteau, et leur chevaulx tous sellez, car ils vouloient monter a cheval, ce levrier nomme *Math* qui estoit coustumier de faire au Roy ce que dist est, laissa le Roy et sen vint au duc de *Lenclastre*, et luy fist toutes telles contenance que paravant il avoit acoustume de faire au Roy, et lui assist les deux pieds sur le col, et le commenca

styles, genus venaticum cum celerrimum tum audacissimum: nec modo in feras, sed in hostes etiam latronesque; præsertim si dominum ductoremve injuriam affici cernat aut in eos concitetur.

The third species is the *Levinarius*, or *Lorarius*; the *Leviner* or *Lyemmer*: the first name is derived from the lightness of the kind; the other from the old word *Lyemme*, a thong: this species being used to be led in a thong, and elipt at the game. Our author says, that this dog was a kind that hunted both by scent and sight, and in the form of its body observed a medium between the hound, and the gre-hound. This probably is the kind known to us by the name of the *Irish gre-hound*, a dog now ex-

moult grandement a cherir, le duc de *Lenclastre* qui point ne cognoissoit ce levrier, demanda au Roy, et que veult ce levrier faire, cousin, dist le Roy, ce vous est une grant



tremely scarce in that kingdom, the late king of *Poland* having procured from thence as many as possible. I have seen two or three in the whole island: they were of the kind called by *M. de Buffon*, *Le grand Danois*, and probably imported there by the *Danes* who long possessed that kingdom. Their use seems originally to have been for the chase of wolves with which *Ireland* swarmed till the latter end of the seventeenth century. As soon as those animals were extirpated, the numbers of the dogs decreased; from that period, they were kept only for state.

The *Vertagus*, or Tumbler, is a fourth species, which took its prey by mere subtlety, depending neither on the sagacity of its nose, or its swiftness: if it came into a warren, it neither barked, or ran on the rabbits, but by a seeming neglect of them, or attention to something else, deceived the object till it got within reach, so as to take it by a sudden spring. This dog was less than the hound, more scraggish, had prickt up ears, and by *Dr. Caius's* description seems to answer to the modern lurcher.

The third division of the more generous

dogs, comprehends those which were used in fowling; first, the *Hispaniolus* or Spaniel: from the name it may be supposed, that we were indebted to *Spain* for this breed. There were two varieties of this kind, the first used in hawking, to spring the game, which are the same with our Starters. The other variety was used only for the net, and was called *Index*, or the Setter; a kind well known at present. This kingdom has long been remarkable for producing dogs of this sort, particular care having been taken to preserve the breed in the utmost purity. They are still distinguished by the name of *English spaniels*; so that notwithstanding the derivation of the name, it is probably they are natives of *Great Britain*. We may strengthen our suspicion by saying that the first who broke a dog to the net was an



cies used in fowling; and was the same as our Water Spaniel, and was used to find or recover the game that was shot.

The *Melitæus*, or *Fotor*; the Spaniel gentle or comforter of Dr. Caius (the modern lap dog) was the last of this division. The *Maltese* little dogs were as much esteemed by the fine ladies of past times, as those of *Bolōgna* are among the modern. Old *Hollingshed* is ridiculously severe on the fair of his days, for their excessive passion for these little animals, which is sufficient to prove they were in his time* a novelty.

The second grand division of dogs comprehends the *Rustici*, or those which were used in the country.

The first species is the *Pastorais*, or Shepherd's dog; the same which is used at present, either in guarding our flocks, or in driving herds of cattle. This kind is so well trained for those purposes, as to attend to every part of the herd be it ever so large, confine them to the road, and force in every straggler without doing it the least injury.

* In the reign of Queen *Elizabeth*.

The next is the *Villaticus*, or *Catenarius*; the Mastiff or Ban dog; a species of great size and strength, and a very loud barker. *Manwood* says,* it derives its name from *mase thefese*, being supposed to frighten away robbers by its tremendous voice. *Caius* tells us that three of these were reckoned a match for a bear; and four for a lion: but from an experiment made in the Tower by *James I.* that noble quadruped was found an unequal match to only three; two of the dogs were disabled in the combat, but the third forced the lion to seek for safety by flight.† The *English* bull dog seems to belong to this species, and probably is the dog our author mentions under the title of *Laniarius*. *Great Britain* was so noted for its mastiffs, that the *Roman* Emperors appointed an officer in this island with the title of *Procurator Cynegii*,‡ whose sole

Magnaue taurorum fracturi colla *Britanni*.*

And *British* dogs subdue the stoutest bulls.

***Gratius* speaks in high terms of the excellency of the *British* dogs,**

Atque ipsos libeat penetrare *Britannos*?

O quanta est merces et quantum impendia supra!

Si non ad speciem mentiturosque decores

Protinus: hæc una est catulis jactura *Britannis*.

At magnum cum venit opus, promiendaque virtus,

Et vocat extremo præceps discrimine *Maors*,

Non tunc egregios tantum admirere *Molossos*.†

If *Britain's* distant coast we dare explore,

How much beyond the cost the valued store!

If shape and beauty not alone we prize,

Which nature to the *British* hound denies:

But when the mighty toil the huntsman warms,

And all the soul is roused by fierce alarms,

When *Mars* calls furious to th' ensanguin'd field

Even bold *Molossians* then to thee must yield.

***Strabo*‡ tells us, that the mastiffs of *Britain* were trained for war, and were used by the *Gauls* in their battles; and it is certain a well-trained mastiff might be of considerable use in distressing such half-armed and irregular combatants as the adversaries of the *Gauls* seem**

* *Claudian de laude Stilichonis. Lib. iii. Lin. 301.*

† *Gratii Cynegeticon. Lin. 175.*

‡ *Strabo. Lib. iv.*

11. *Fox. Vulpes. Raii syn. quad.* 177. *Canis Vulpes. Gm. Lín.* 73.
Morton's Northampt. 444. *Canis Alopex. C. cauda rec.*
Meyer's an. l. Tab. 36. *ta apice nigro, vulpes*
Canis fulvus, pilis cinereis *campestris. Lín. Syst.* 59.
intermixta. Brisson quad. *Canis cauda recta apice al-*
173. *bo. Faun. Succ.* 7.
De Buffon. Tom. vii. 75. *Vulpes vulgaris. Klein.*
Tab. 6. *quad.* 73.
Gesner quad. 966. *Br. Zool.* 23. *Hist. quad. p.*
Vulpes auctorum. Hassel- 251. *Arct. Zool. l.* 51.
quist Itin. 191.

<i>Brit.</i>	Llwynog, <i>fæm.</i> Llwynoges	<i>Germ.</i>	Fuchs
<i>Fren.</i>	Le Renard	<i>Dut.</i>	Vos
<i>Ital.</i>	Volpe	<i>Swed.</i>	Raff
<i>Span.</i>	Raposa	<i>Dan.</i>	Rev.
<i>Port.</i>	Rapoza		


THE fox is a crafty, lively, and libidinous animal. It begins to engender at the age of twelve months; it breeds only once in a year



been proved that the congenerous wolf will.* Mr. Brook, animal-merchant in *Holborn*, turned a wolf to a *Pomeranian* bitch then in heat: the congress was immediate, with the circumstances usual with the canine species. The bitch brought ten whelps, one of which I afterwards saw at the Duke of Gordon's in *Scotland*. It bore a great resemblance to the male parent, and had much of its nature: being slipped at a weak deer, it instantly caught at the animal's throat and killed it. The fox sleeps much in the day, but is in motion the whole night in search of prey. It will feed on flesh of any kind, but its favourite food is lambs, rabbits, hares, poultry, and feathered game. It will,

* *M. de Buffon* asserts the contrary, and gives the following account of the experiment he had made. *J'en fis garder trois pendant deux ans, une femelle et deux mâles: on tenta inutilement de les faire accoupler avec des chiennes; quoiqu'ils n'eussent jamais vu de femelle de leur espece, et qu'ils parussent pressés du besoin de jour, ils ne purent s'y déterminer, ils refuserent toutes les chiennes, mais des qu'on leur presenta leur femelle légitime, ils la couvrirent, quoiqu'enchainées, et elle produisit quatre petits.* *Hist. Naturelle*, vii. 81. The same experiments were tried with a bitch and a male fox, and with a dog and a female wolf, and as *M. de Buffon* says with the same ill success. Vol. v. 210, 212. but the fact just cited, proves the possibility past contest.

when urged by hunger, eat carrots and insects; and those that live near the sea-coasts, will, for want of other food, eat crabs, shrimps, or shell fish. In *France* and *Italy*, it does incredible damage in the vine-yards, by feeding on the grapes, of which it is very fond. The fox is a great destroyer of rats, and field mice, and like the cat, will play with them a considerable time, before it puts them to death. When the fox has acquired a larger prey than it can devour at once, it never begins to feed till it has secured the rest, which it does with great address. It digs holes in different places, returns to the spot where it had left the booty, and (supposing a whole flock of poultry to have been its prey) will bring them one by one, thrust them in with its nose, and then conceal them by ramming the loose earth on them, till the calls of hunger incite him to pay them



mirer of its bushy tail, with which it frequently amuses and exercises itself by running in circles to catch it, and in cold weather wraps it round its nose.

The smell of this animal in general is very strong, but that of the urine is most remarkably foetid. This seems so offensive even to itself, that it will take the trouble of digging a hole in the ground, stretching its body at full length over it, and there, after depositing its water, cover it over with the earth, as the cat does its dung. The smell is so offensive, that it has often proved the means of the fox's escape from the dogs, who have so strong an aversion to the filthy effluvia, as to avoid encountering the animal it came from. It is said that the fox makes use of its urine as an expedient to force the cleanly badger from its habitation: whether that is the means is rather doubtful, but that the fox makes use of the badger's hole is certain; not through want of ability to form its own retreat, but to save itself some trouble, for after the expulsion of the first inhabitant, the fox improves, as well as enlarges it considerably, adding several chambers, and providently making several entrances to secure a

retreat from every quarter. In warm weather it will quit its habitation for the sake of basking in the sun, or to enjoy the fresh air; then it rarely lies exposed, but chuses some thick brake, and generally of gorse, that it may rest secure from surprize. Crows, magpies, and other birds, who consider the fox as their common enemy, will often, by their notes of anger, point out its retreat.

This animal is common in all parts of *Great Britain*, and so well known as not to require a description: The skin is furnished with a soft and warm fur, which in many parts of *Europe* is used to make muffs and lining for cloaths. Vast numbers are taken in *Le Valais* and the *Alpine* parts of *Switzerland*. At *Lausanne* there are furriers who are in possession of between two and three thousand skins, all caught in one winter.



wether: the Mastiff fox is less, but more strongly built: the *Corgi*, or Cur fox is the lest, and lurks about hedges, out-houses, &c. and is the most pernicious of the three to the feathered tribe. The first of these varieties has a white tag or tip to the tail; the last a black. The number of these animals in general would soon become intolerable, if they were not proscribed, by having a certain reward set on their heads.

In this place we should introduce the wolf,* *Wolf.* a congenerous animal, if we had not fortunately a just right to omit it in a history of *British* quadrupeds. It was, as appears by *Hollingshed*,† very noxious to the flocks in *Scotland* in 1577; nor was it entirely extirpated till about 1680, when the last wolf fell by the hand of the famous Sir *Ewen Cameron*. We may therefore with confidence assert the non-existence of those animals, notwithstanding *M. de Buffon* maintains that the *English* pretend to the contrary.‡


It has been a received opinion, that the other

* *Hist. quad.* N. 159. p. 248. *Arctic Zool.* i. N. 9.

† *Desc. Scot.* 10.

‡ *Tom.* vii. p. 50.

as Camden, p. 902, informs us, certain persons at *Wormhill* held their lands by the duty of hunting and taking the wolves which infested the country, whence they were stiled *Wolve hunt*. To look back into the *Saxon* times we find that in *Athelstan's* reign wolves abounded so in *Yorkshire*, that a retreat was built at *Flixton* in that county, to defend passengers from the wolves, that they should not be devoured by them: and such ravages did those animals make during winter, particularly in *January*, when the cold was severest, that our *Saxon* ancestors distinguished that month by the title of *wolf moneth*.^{*} They also called an outlaw *Wolfshed*, as being out of the protection of the law, proscribed, and as liable to be killed as that destructive beast. *Et tunc gerunt caput lupinum, ita quod sine judiciali inquisitione rite pereant.* *Bracton.* lib. iii. Tr. 11. c. 11. also



killing wolves being made in the county of *Cork* about that time.*

The Bear,† another voracious beast, was *Bear*. once an inhabitant of this island, as appears from different authorities. To begin with the more ancient, *Martial* informs us, that the *Caledonian* bears were used to heighten the torments of the unhappy sufferers on the cross.

*Nuda Caledonio sic pectora præbuit urso
Non falsa pendens in cruce Laureolus.‡*

Plutarch relates, that bears were transported from *Britain* to *Rome*, where they were much admired.¶ Mr. *Llwyd*§ also discovered in some old *Welsh* MS. relating to hunting, that this animal was reckoned among our beasts of chase, and that its flesh was held in the same esteem with that of the hare or boar. Many places in *Wales* still retain the name of *Pen-narth*, or the bear's head, another evidence of their existence in our country. It does not appear how long they continued in that princi-

* *Smith's hist. Cork.* II. 226.


† *Hist. quad.* N. 208. v. 11. p. 1. *Arctic Zool.* 1. N. 20.

‡ *Martial. Lib. Spect. ep.* 7.

¶ *Plutarch*, as cited by *Camden*, p. 1227.

§ *Raii syn. quad.* 214.

pality, but there is a proof of their infesting *Scotland* as late as the year 1057,* when a *Gordon*, in reward for his valor in killing a fierce bear, was directed by the King to carry three Bear's heads on his banner. They are still found in the mountainous parts of *France*, particularly about the *Grande Chartreuse* in *Dauphinè*, where they make great havoc among the oat-ricks of the poor farmers. Long after their extirpation out of this kingdom, these animals were imported for an end, that does no credit to the manners of the times: bear-baiting in all its cruelty was a favorite pastime with our ancestors. We find it in *Queen Elizabeth's* days, exhibited, tempered with other merry disports, as an entertainment for an ambassador, and again among the various amusements prepared for her majesty at the princely *Kenck* on the



‘ kynge of his lordschip pastyme the said xii
‘ days.*

It will not be foreign to the subject here to *Menageries*. add, that our monarchs in very early times kept up the state of a menagery of exotic animals. *Henry I.* had his lions, leopards, lynxes, and *porpentinae* (porcupines) in his park at *Woodstock*.† The emperor *Frederick* sent to *Henry III.* a present of three leopards in token of his royal shield of arms, wherein three leopards were pictured.‡ The same prince had also an elephant which (with its keeper) was maintained at the expence of the sheriffs of *London* for the time being.|| The other animals had their keeper, a man of fashion, who was allowed six-pence a day for himself and six-pence for each beast.

* *Northumberland Household Book.*

† *Stow's hist. London*, i. 79.

‡ *Ibid.*

|| *Ibid.* 118.

their domestic mates, and return home pregnant by the former.

They are taken either in traps, or by shooting; in the latter case it is very dangerous only to wound them, for they will attack the person who injured them, and have strength enough to be no despicable enemy. Wild cats were formerly reckoned among the beasts of chase, as appears by the charter of *Richard II.* to the abbot of *Peterborough*, giving him leave to hunt the hare, fox, and wild cat. The use of the fur was in lining robes; but it was esteemed not of the most luxurious kind, for it was ordained 'that no abbess or nun should use 'more costly apparel than such as is made of 'lambs or cat skins.'* In much earlier times it was also the object of the sportsman's diversion.

Felemque minacem




<i>Felis domestica</i> sen Catus.	<i>De Buffon. Tom. vi. 3. Tab. 2. 17. Common</i>
<i>Rati syn. quad. 170.</i>	<i>Felis Catus. Gm. Lin. 80.</i>
<i>Charlton ex. 20.</i>	<i>Felis cauda elongata, auribus</i>
<i>Meyer's an. i. Tab. 15.</i>	<i>æqualibus. Faun. Suec. 9.</i>
<i>Gesner quad. 317.</i>	<i>Br. Zool. 21. Hist. quad. No.</i>
<i>Brisson quad. 191.</i>	<i>195. p. 297.</i>

<i>Brit. Cath, mas. Gwr cath</i>	<i>Germ. Katz</i>
<i>Fren. Le Chat</i>	<i>Dut. Cyperse Kat. Huyskat.</i>
<i>Ital. Gatto</i>	<i>Swed. Katta</i>
<i>Span. Gato</i>	<i>Dan. Kat.</i>
<i>Port. Gato</i>	

THIS animal is so well known as to make a description of it unnecessary. It is an useful, but deceitful domestic; active, neat, sedate, intent on its prey. When pleased purres and moves its tail; when angry spits, hisses, and strikes with its foot; when walking, it draws in its claws. It drinks little; is fond of fish; washes its face with its fore-foot, (*Linnaeus* says at the approach of a storm). The female is remarkably salacious; a piteous, squalling, jarring lover. Its eyes shine in the night; its hair when rubbed in the dark emits fire; it is even proverbially tenacious of life; always

lights on its feet; is fond of perfumes; *Marum*, *Catmint*, *Valerian*, &c.*

Our ancestors seem to have had a high sense of the utility of this animal. That excellent Prince *Howel dda*, or *Howel the Good*, did not think it beneath him (among his laws relating to the prices, &c. of animals,†) to include that of the cat, and to describe the qualities it ought to have. The price of a kitling before it could see, was to be a penny; till it caught a mouse two-pence; when it commenced mouser, four-pence. It was required besides, that it should be perfect in its senses of hearing and seeing, be a good mouser, have the claws whole, and be a good nurse; but if it failed in any of these qualities, the seller was to forfeit to the buyer the third part of its value. If any one stole or killed the cat that guarded the Prince's granary, he was to forfeit a milch ewe, its fleece



and lamb; or as much wheat as when poured on the cat suspended by its tail (the head touching the floor) would form a heap high enough to cover the tip of the former.* This last quotation is not only curious, as being an evidence of the simplicity of antient manners, but it almost proves to a demonstration that cats are not *aborigines* of these islands, or known to the earliest inhabitants. The large prices set on them, (if we consider the high value of specie at that time†) and the great care taken of the improvement and breed of an animal that multiplies so fast, are almost certain proofs of their being little known at that period.

* Sir *Ed. Coke* in his reports, mentions the same kind of punishment antiently for killing a swan, by suspending it by the bill, &c. Vide *Case des Swannes*.

† *Howel dda* died in the year 948, after a reign of thirty-three years over *South Wales*, and eight years over all *Wales*.

GENUS IX. BADGER.

Tons, five before; five behind.

CLAWS on the fore feet very long, strait.

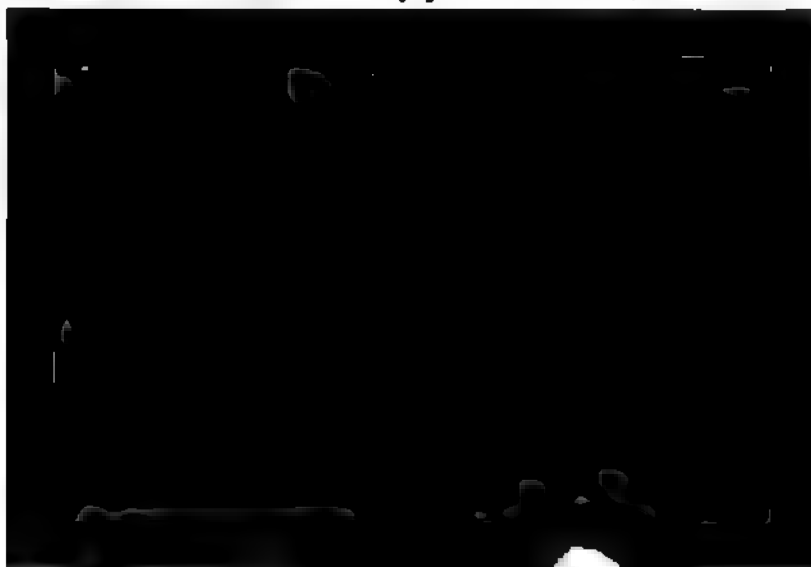
ORIFICE a transverse between the tail and the
anus.

12. **Common Badger**, Brock, Gray Pate, *Ursus Meles*. *Ursus cana*
Taxus sive *Meles*. *Raii* concolore, corpore supra
syn. quad. 185. cinereo, subtus nigro, fa-
Meyer's an. i. Tab. 31. scia longitudinali per o-
Sib. Scot. 11. culos auresque nigra. *Gm.*
Meles pilis ex sordidè albo *Lin.* 102.
 et nigro variegatis vestita, *Coati cauda brevi. Klein*
 capite tæntis alternatim *quad.* 73.
 albis et nigris variegato. *Meles unguibus anticis lon-*
Brisson quad. 183. gissimis. *Faun. Suec.* 20.
De Buffon. Tom. viii. Tab. *Br. Zool.* 30. *Hist. quad.*
 7. p. 104. No. 215. ii. p. 14. *Arct.*
Gen. quad. 686. *Zool.* i. p. 81.

as if formed for rapine, yet it is found to be perfectly inoffensive: roots, fruits, grass, insects and frogs are its food: it is charged with destroying lambs and rabbits, but on enquiry, there seems to be no other reason to think it a beast of prey, than from the analogy there is between its teeth and those of carnivorous animals. Nature denied the badger the speed and activity requisite to escape its enemies, so hath supplied it with such weapons of offence that scarcely any creature would hazard attacking it; few animals defend themselves better, or bite harder: when pursued, they come to bay, and fight with great obstinacy. It is indolent, and sleeps much, for which reason it is always found very fat. It burrows under ground, like the fox, and forms several different apartments, though with only one entrance, carrying, in its mouth, grass in order to form a bed for its young. It confines itself to its hole during the whole day, feeding only at night: it is so cleanly an animal as never to obey the calls of nature in its apartments, but goes out for that purpose: it breeds only once in a year, and brings four or five at a time.

Description. The usual length of the badger, is two feet six inches, exclusive of the tail, which is but six inches long: the weight is fifteen pounds. The eyes are very small; the ears short and rounded; the neck short; the whole shape of the body clumsy and thick, which being covered with long coarse hairs like bristles, makes it appear still more awkward. The mouth is furnished with six cutting teeth and two canine teeth in each jaw; the lower has five grinders on each side, the upper four; in all thirty four.

The nose, chin, lower sides of the cheeks, and the middle of the forehead, are white: each ear and eye is inclosed in a pyramidal bed of black, the base of which incloses the former; the point extends beyond the eye to the nose: the hairs on the body are of three colors; the bottoms of a dirty yellowish white, the middle



into five toes; those on the fore feet are armed with long claws, well adapted for digging; in walking the badger treads on its heel, like the bear, which brings the belly very near the ground. Immediately below the tail, between that and the anus, is a narrow transverse orifice, which opens in a kind of pouch, from whence exudes a white substance of a very fœtid smell; this seems peculiar to the badger and the Hyæna.

This animal is not mentioned by *Aristotle*; not that it was unknown to the antients, for *Pliny* takes notice of it.*

Naturalists once distinguished the badger by the name of the swine-badger, and the dog-badger, from the supposed resemblance of their heads to those animals, and so divided them into two species; but the most accurate observers have been able to discover only one kind; that, whose head and nose resemble those of the dog.

The skin of the badger, when dressed with the hair on, is used for pistol furniture. The Highlanders make their pendent pouches of it.

* *Alia solertia in metu Melibus, sufflatæ cutis distentus ictus hominum et morsus canum arcent. Lib. viii. c. 38.*

The hair is frequently used for making brushes to soften the shades in painting, which are called sweetening tools. These animals are also hunted in the winter nights for the sake of their flesh; for the hind quarters may be made into hams, not inferior in goodness to the best bacon. The fat is in great request for ointments and salves.

In *China* it seems to be a more common food than in *Europe*, for Mr. Bell* says, he has seen about a dozen at one time in the markets at *Pekin*, and that the *Chinese* are very fond of them. It does not appear that this animal is found in the hotter parts of *Asia*, but is confined to the cold, or the temperate parts of the world.

* *Bell's Travels*, I. 83.



GENUS X. WEESEL.

Nose sharp.

Body slender.


Toes five before, five behind.

- | | |
|--|--|
| Putorius. Polecat or Fitchet. <i>Raii syn. quad.</i> 199. | <i>De Buffon Tom. vii. 199. 14. Fitchet. Tab. 23.</i> |
| <i>Meyer's an. ii. Tab. 6.</i> | <i>Mustela Putorius. Gm. Lin.</i> 96. |
| <i>Charlton ex. 20.</i> | <i>Mustela foetida. Klein. quad.</i> 63. |
| <i>Germ. quad. 767.</i> | |
| <i>Mustela pilis in exortu ex cinereo albidis, colore nigricante terminatis, oris circumferentia alba. Brisson. quad. 180.</i> | <i>Mustela flavescens nigricans, ore albo, collari flavescens. Faun. Suec. 16. Br. Zool. 37. Hist. Quad. No. 238. ii. p. 37.</i> |
| <i>Brit. Ffwlbard</i> | <i>Germ. Iltis, ulk, Buntsing</i> |
| <i>Fren. Le Putois</i> | <i>Dut. Bonsing</i> |
| <i>Ital. Foetta, Puzolo</i> | <i>Swed. Iller</i> |
| <i>Span. Putoro</i> | <i>Dan. Ilder.</i> |

THE length of this animal is about seven-teen inches, exclusive of the tail; that of the tail six. The shape of this species, in particular, as well as of the whole genus, is long and

slender; the nose sharp-pointed, and the legs short, in fine, admirably formed for insinuating itself into the smallest holes and passages, in search of prey. It is very nimble and active, runs very fast, will creep up the sides of walls with great agility, and spring with vast force. In running, the belly seems to touch the ground; in preparing to jump, it arches its back, which assists it greatly in that action.

The ears are short, rounded and tipt with white: the circumference of the mouth, that is to say, the ends of the lower and upper jaws are white; the head, throat, breast, legs and thighs, are wholly of a deep chocolate color, almost black; the sides are covered with hairs of two colors, the ends of which are of a blackish hue, like the other parts; the middle of a full tawny color; in others cinereous. The toes are long, and separated to the very origin;



trees. It will sometimes lodge under hay-ricks, and in barns; in the winter it frequents houses, and makes a common practice of robbing the dairy of the milk; it also makes great havoc in warrens.

It brings five or six young at a time. Warreners assert, that the fitchet will mix with the ferret, and that they are sometimes obliged to procure an intercourse between these animals, to improve the breed of the latter, which by long confinement will abate its savage nature, and become less eager after rabbits, and consequently less useful. *M. de Buffon* denies that it will admit the fitchet, yet gives the figure of a variety under the name of the *Ferret Polecat*,* which has much the appearance of being a spurious offspring. But to put the matter out of dispute, the following fact need only be related: the Rev. Mr. *Lewis*, Vicar of *Llan-sowel* in *Caermarthenshire*, had a tame female ferret, which was permitted to go about the house; at length it absented itself for several days, and on its return proved with young; it produced nine, of a deep brown color, more

* *La Furet Putois*, Tom. vii. Tab. 25.

resembling the fitchet than the ferret. What makes the matter more certain is, that Mr. *Lewis* had no males of this species for it to couple with, neither were there any within three miles, and those were closely confined.

The ferret agrees with the fitchet in many respects, particularly in its thirst after the blood of rabbits. It may be added, that the ferret comes originally from *Africa*;^{*} and is only cultivated in *Great Britain*.

Though the smell of the fitchet, when alive, is rank and disagreeable, even to a proverb, yet the skin is drest with the hair on, and used as other furs for tippets, &c. and is also sent abroad to line clothes.

* Καὶ γὰρ αἰγίαι ὡς ἡ λεῖον φέρι. *Strabo, Lib. iii.*
p. 144. *Edit. Casaubon.*

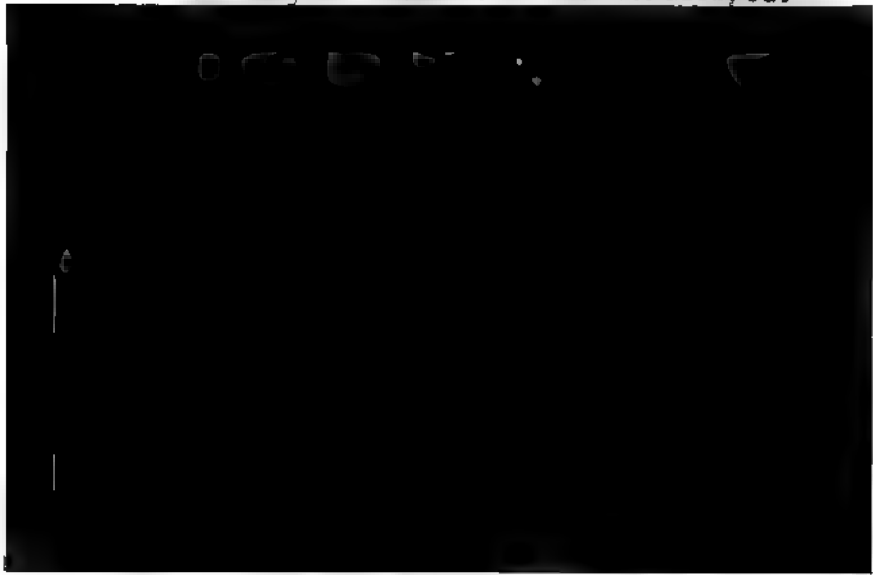
- Martes**, alias Foyna. The
Martin and Martlet. *Ruii*
syn. quad. 200.
Meyer's an. ii. *Tah.* 4.
Martin, or Martern. *Charl-*
ton ex. 20.
The Mertrick. *Martin's*
West. Isles, 36.
Gen. quad. 764.
Mustela pilis in exortu albi,
dis castaneo colore termi-
natis vestita, gutture albo. 15. *Martin*
Brisson quad. 178.
De Buffon. Tom. vii. 161.
Mustela Martes. Gm. Lin.
95.
M. Martes. Klein. quad. 64.
M. fulvo nigricans gula pal-
lida. Faun. Suec. 15.
Br. Zool. 38. *Hist. quad.*
No. 242. ii. p. 41.

<i>Brit.</i> Bela graig	<i>Germ.</i> Hauss marder, stein marder
<i>Fren.</i> La Fouine	<i>Dut.</i> Marter
<i>Ital.</i> Foina, Fonina	<i>Swed.</i> Mard
<i>Span.</i> Marta, Gibellina	<i>Dan.</i> Maar,

THIS is the most beautiful of the *British Manners*,
beasts of prey: its head is small, and elegantly
formed: its eyes lively; and its motions shew
great grace, as well as agility. When taken
young, it is easily tamed, is extremely play-
ful, and in constant good humour: nature will
recur, if it gets loose, for it will immediately
take advantage of its liberty, and retire to its
proper haunts. It makes great havoc among
poultry, game, &c. and will eat mice, rats,
and moles. With us it inhabits woods, and

forms its lodge in the hollows of trees; it brings from four to six young at a time.

Description. The martin is about eighteen inches long; the tail ten, or, if the measurement be taken to the end of the hair at the point, twelve inches. The ears are broad, round and open; the back, sides, and tail, are covered with a fine thick down, and with long hair intermixed; the bottom is ash-colored, the middle of a bright chesnut color, the tips black; the head brown, with some slight cast of red; the legs and upper sides of the feet are of a chocolate color; the palms, or under sides, are covered with thick down like that on the body; the feet are broad; the claws white, large and sharp, well adapted for climbing trees, which in this country are its constant residence. The throat and breast are white; the belly of the same color with the back, but




The skin and excrements of this animal *Fine Smell.* have a fine musky scent, and are entirely free from that rankness which distinguishes the other species of this genus: the skin is a valuable fur, and much used for linings to the gowns of magistrates.

<i>Martes abietum.</i> <i>Raii syn.</i>	colore terminatis vestita, 16. <i>Pine</i>
<i>quad.</i> 200.	<i>guttare flavo. Brisson Martin.</i>
<i>Meyer's an. ii. Tab. 5.</i>	<i>quad.</i> 179.
<i>Martes sylvestris. Gesner</i>	<i>De Buffon. Tom. vii. 186.</i>
<i>quad.</i> 765.	<i>Tab. 22.</i>
<i>Mustela Martes. Gm. Lin. 95.</i>	<i>Br. Zool. 39. Hist. quad.</i>
<i>Mustela pilis in exortu ex</i>	<i>No. 244. ii. p. 42. Arct.</i>
<i>cinereo albidis castaneo</i>	<i>Zool. i. No. 27. p. 88.</i>
<i>Brit. Bela goed</i>	<i>Port.</i>
<i>Fren. La Marte</i>	<i>Germ. Field-marder, wild-</i>
<i>Ital. Marta, Martura, Mar-</i>	<i>marder</i>
<i>tora, Martorello</i>	<i>Dut. Marter</i>
<i>Span. Marta</i>	<i>Swed.</i>

THIS species is found in *Great Britain*, but is much less common in *England* than the former; it is sometimes taken in the counties of *Meirioneth* and *Caernarvon*, as I was informed by my late worthy friend *Mr. W. Morris*, where it is distinguished from the other kind, by the name

of *bela goed*, or wood martin, it being supposed entirely to inhabit the woods; the *bela graig* to dwell only among the rocks. Tho' this is so rare in these parts, yet it is the only kind in *Scotland*, where it inhabits the fir forest, building its nest at the top of the trees.* It loves a cold climate, and is found in much greater numbers in the north of *Europe*, than in the other parts. *North America* abounds with these animals. Prodigious numbers of their skins are annually imported from *Hudson's bay* and *Canada*; in one of the company's sales not fewer than 12,370 good skins, and 2360 damaged ones were sold, and about the same time, the *French* brought into the port of *Rochelle* from *Canada*, not less than 30,325.

The principal difference between this and the former kind, consists in the color of the breast, which is yellow; the color of the body

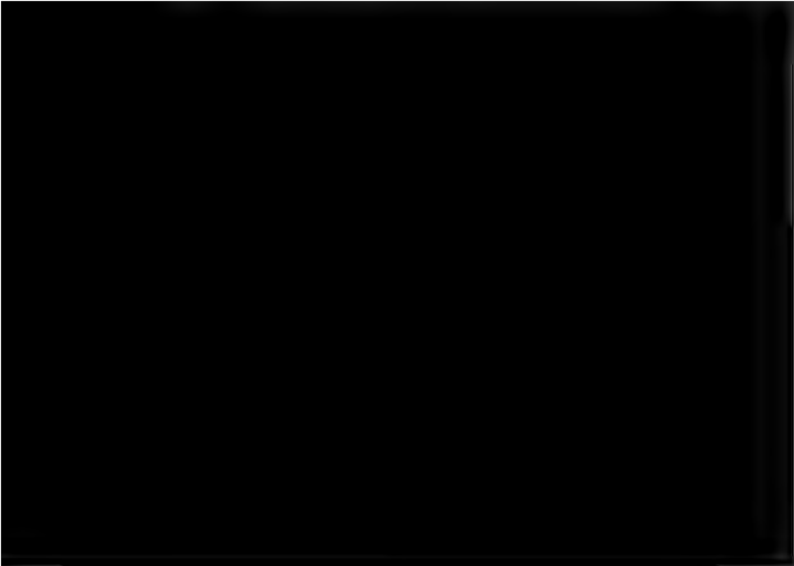


The Weasel or Weesel, *alba. Brisson quad. 173. 17. Comm*
Mustela vulgaris: in *York-* *De Buffon Tom. vii. 235.*
shire, the Fitchet or Fou- *Tab. 29.*
mart. Rati syn. quad. Gcsn. quad. 753.
195. Mustela vulgaris. Klein.
Girald. Cambrens. 149. quad. 62.
The Whitred. Sib. Scot. 11. Br. Zool. 39. Hist. quad.
Mustela vulgaris. Gm. Lin. No. 244. Arct. Zool. i.
99. No. 25. p. 86.
Mustela supra rutila, infra

<i>Brit. Bronwen</i>	<i>Port. Doninha</i>
<i>Fren. La Belette</i>	<i>Germ. Wisel</i>
<i>Ital. Donnola, Ballottula,</i>	<i>Dut. Weezel</i>
<i>Benula</i>	<i>Swed. Vesla</i>
<i>Span. Comadreia</i>	<i>Dan. Væsel.</i>

THIS species is the lest of the weesel kind, *Description.*
the length of the head and body not exceed-
ing six, or at most seven inches. The tail is
only two inches and a half long, and ends in
a point; the ears are large, and the lower parts
of them are doubled in. The whole upper part
of the body, the head, tail, legs, and feet are
of a very pale tawny brown: the whole under
side of the body from the chin to the tail is
white, but beneath the corners of the mouth
on each jaw is a spot of brown.

Manners. This, like the rest of the kind, is very destructive to young birds, poultry, and young rabbits, and besides is a great devourer of eggs. It does not eat its prey on the place, but after killing it, by one bite near the head, carries it off to its young, or its retreat. The weasel also preys upon moles, as appears by its being sometimes caught in the mole-traps. It is a remarkably active animal, and will run up the sides of walls with such facility, that scarcely any place is secure from it; and its body is so small, that there is scarcely any hole but what is pervious to it. This species is much more domestic than the others; frequenting out-houses, barns, and granaries, where, to make as it were some atonement for its depredations among our tame fowl, it soon clears its haunts from rats and mice, being infinitely more an enemy to them than the



with our weasel in its brown color; but describes it in the white state under the title of *Somus*, or *Mustela nivalis*.* I have met with it so circumstanced, in the isle of *Ilay*.


- | | | |
|---|--|------------------------------|
| <i>Mustela candida</i> , animal ermineum, <i>Rati syn. quad.</i> 198. | <i>Gesner quad.</i> 753. | 18. <i>Common or Ermine.</i> |
| <i>Mort. Northampt.</i> 442. | <i>Mustela erminea</i> . <i>M. plan-</i> | |
| <i>Meyer's an. ii. Tab.</i> 23, 24. | <i>tis fissis</i> , <i>caudæ apice atro.</i> | |
| <i>Mustela hieme alba</i> , æstate supra rutila infra alba, <i>caudæ apice nigro. Bris-</i> | <i>Gm. Lin.</i> 98. <i>Faun. Suec.</i> 17. | |
| <i>son quad.</i> 176. | <i>Pontop. Norway. Part ii.</i> p. 25. | |
| <i>De Buffon, Tom. vii.</i> 240. | <i>Br. Zool.</i> 40. <i>Hist. quad.</i> No. 234. ii. p. 35. <i>Arct.</i> | |
| <i>Tab.</i> 29. <i>Fig.</i> 2. <i>Tab.</i> 31. <i>Fig.</i> 1. | <i>Zool.</i> i. No. 25. p. 86. | |

- | | |
|------------------------------------|-----------------------------------|
| <i>Brit. Carlwm</i> | <i>Germ. Hermelin, Klein.</i> 63. |
| <i>Fren. L'Hermine, Le Roselet</i> | <i>Swed. Hermelin, Lekatt</i> |
| <i>Ital. Armellino</i> | <i>Dut. Hermilyn</i> |
| <i>Span. Armino, Armelina</i> | <i>Dan. Hermelin, Lekat.</i> |

THE length of the stoat to the origin of *Description* the tail, is ten inches; that of the tail is five inches and a half. The colors bear so near a resemblance to those of the weasel, as to cause

* *Simillima Ermineo sed dimidio minor, caudæ apice pilis ullis vix nigris. Faun. Suec. No. 18.*

them to be confounded together by the generality of common observers; the weasel being usually mistaken for a small stoat; but these animals have evident and invariable specific differences, by which they may be easily known. First, by the size; the weasel being ever less than the stoat: secondly, the tail of the latter is always tipped with black, is longer in proportion to the bulk of the animal, and more hairy: whereas the tail of the weasel is shorter, and of the same color with the body: thirdly, the edges of the ears, and the ends of the toes in this animal are of a yellowish white. It may be added, that the stoat haunts woods, hedges and meadows, especially where there are brooks, whose sides are covered with small bushes; and sometimes (but less frequently than the weasel) inhabits barns, and other buildings.



a very valuable article of commerce in *Norway*, *Lapland*, *Russia*, and other cold countries, where they are found in prodigious numbers. They are also very common in *Kamtschatka* and *Siberia*.* In *Siberia* they burrow in the fields, *How taken*, and are taken in traps baited with flesh. In *Norway*† they are either shot with blunt arrows, or taken in traps made of two flat stones, one being propped up with a stick, to which is fastened a baited string, which when the animals nibble, the stone falls down and crushes them to death. The *Laplanders* take them in the same manner, only instead of stones make use of two logs of wood.‡ The stoat is sometimes found white in *Great Britain*, but not frequently, and then it is called a white weesel. That animal is also found white, but may be easily distinguished from the other in the ermine state, by the tail, which in the weesel is of a light tawny brown. With us the former is observed to begin to change its color from brown to white in *November*, and to begin to resume the brown the beginning of *March*.

* *Bell's Travels*, i. 199.

† *Hist. Norway*, ii. 25.

‡ *Ouvres de Maupertuis*, iii. 187.

The natural history of this creature is much the same with that of the weasel, its food being birds, rabbits, mice, &c. its agility the same, and its scent equally foetid : it is much more common in *England* than that animal.

GENUS XI. OTTER.

Tons five on each foot; palmated, or connected by a membrane.

- | | |
|---|---|
| 19. <i>Common</i> Le Loutre, <i>Belon</i> 26. pl. 27. | <i>De Buffon</i> Tom. vii. 134. |
| Lutra. The Otter. <i>Rail syn.</i> | <i>Tab.</i> 11. xiii. 322. |
| <i>quad.</i> 187. | <i>Mustela Lutra.</i> <i>Gm. Lin.</i> 93. |
| <i>Grew's Mus.</i> 16. | <i>Pontop. Norw.</i> 2. 27. |
| <i>Mort. Northampt.</i> 444. | Lutra digitis omnibus inqua- |
| <i>Sib. Scot.</i> 20. | libus. <i>Faun. Suec.</i> 12. |
| <i>Gesner quad.</i> 687. | <i>Br. Zool.</i> 32. <i>Hist. quad.</i> |
| Lutra castanei coloris. <i>Bris-</i> | No. 281. li. p. 77. <i>Arct.</i> |
| <i>son quad.</i> 201. | <i>Zool.</i> i. 99. |

Ray. Defens.

Germ. Otter. Fisch Otter.

The head and nose are broad and flat, the neck short, and equal in thickness to the head; the body long; the tail broad at the base, tapers off to a point at the end, and is the whole way compressed horizontally. The eyes are very small, and placed nearer the nose than is usual in quadrupeds: the ears extremely short, and their orifice narrow: the opening of the mouth is small, the lips muscular, and capable of being brought very close together: the nose and the corners of the mouth are furnished with very long whiskers, so that the whole appearance of the otter is something terrible: it has thirty-six teeth, six cutting and two canine above and below; of the former the middlemost are the best; it has besides five grinders on each side in both jaws. The legs are very short, but remarkably strong, broad, and muscular; the joints articulated so loosely, that the animal is capable of turning them quite back, and bringing them on a line with the body, so as to perform the office of fins. Each foot is furnished with five toes, connected by strong broad webs, like those of water fowl. Thus nature in every article has had attention to the way of life she allotted to an animal,

whose food is fish; and whose haunts must necessarily be about waters.

The color of the otter is entirely a deep brown, except two small spots of white on each side the nose, and another under the chin. The *Fur*. skin of this animal is very valuable, if killed in the winter, and is greatly used in cold countries for lining cloaths; but in *England* it only serves for covers for pistol furniture. The best furs of this kind come from the northern part of *Europe*, and *America*. Those of *N. America* are larger than the *European* otters. The *Indians* make use of their skins for pouches, and ornament them with bits of horn. The finest sort come from the colder parts of that continent; where they are also most numerous. Westward of *Carolina*,* there are some found of a white color inclining to yellow.

Manners. The otter swims and dives with great cele-



will in concert hunt that strong and active fish the salmon. One stations itself above, the other below the place where the fish lies, and continue chasing it incessantly till the salmon quite wearied becomes their prey. To suppose that they never prey in the sea is a mistake; for they have been often seen in it both swimming and bringing their booty on shore, which has been observed in the *Orknies* to be cod, and congers. Its flesh is excessively rank and fishy. The *Romish* church permits the use of it on maigre-days. In the kitchen of the *Carthusian* convent near *Dijon*, we saw one preparing for the dinner of the religious of that rigid order, who, by their rules, are prohibited during their whole lives, to eat flesh.

It shews great sagacity in forming its habitation: it burrows under ground on the banks of some river or lake, and always makes the entrance of its hole under water; works upwards to the surface of the earth, and forms before it reaches the top, several *holts*, or lodges, that in case of high floods, it may have a retreat, for no animal affects lying drier, and there makes a minute orifice for the admission of air; it is further observed, that this animal,

the more effectually to conceal its retreat, contrives to make even this little air hole in the middle of some thick bush.

The otter brings four or five young at a time: as it frequents ponds near gentlemen's houses, there have been instances of litters being found in cellars, sinks, and other drains. It is observable that the male otters never make any noise when taken, but the pregnant females emit a most shrill squeal.

Sea Otter. Sir Robert Sibbald, in his history of *Fife*, p. 49, mentions a Sea Otter, which he says differs from the common sort, in being larger, and having a rougher coat; but probably it does not differ specifically from the kind that frequents fresh waters. Did not *Aristotle* place his *Latax** among the animals which seek their

* Τριαιμία δὲ ἔστιν ὁ τοῦ καλυμμένου καστορέως, καὶ τοῦ σαρδίου, καὶ τοῦ σαρδίου, καὶ τοῦ σαρδίου, καὶ ὁ καλυμμένος λαίλαξ. ἔστι δὲ τὸ πλάτυ-

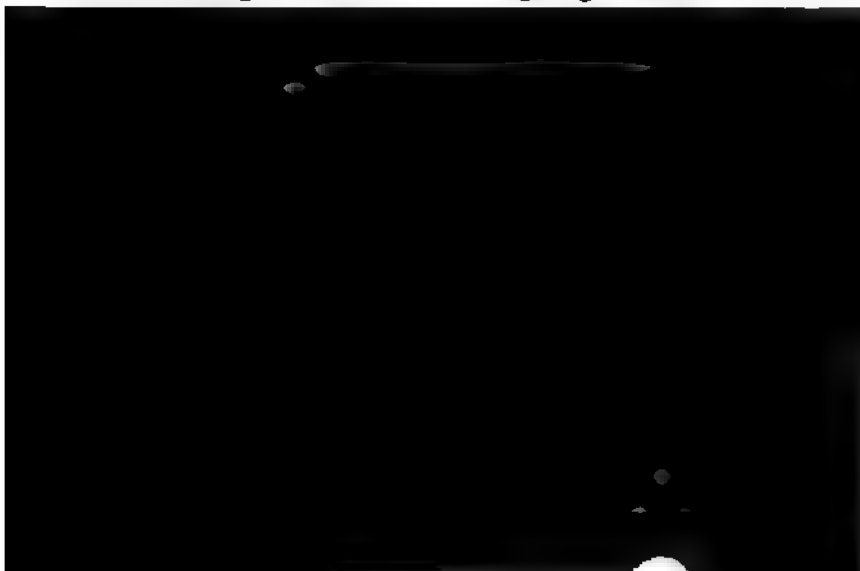
food among fresh waters, we should imagine we had here recovered this lost animal, which he mentions immediately after the otter, and describes as being broader. Though this must remain a doubt, we may with greater confidence suppose the sea otter to be the *Loup marin* of *Belon*,* which from a hearsay account, he says, is found on the *English* coasts. He compares its form to that of a wolf, and says, it feeds rather on fish than sheep. That circumstance alone makes it probable, *Sibbald's* animal was intended, it being well known, the otter declines flesh when it can get fish. Little stress ought to be laid on the name, or comparison of it to a wolf; this variety being of a size so superior to the common, and its hair so much more shaggy, a common observer might readily catch the idea of the more terrible beast, and adapt his comparison to it.

habet robustos, quippe quæ noctu plerumque aggrediens, virgulta proxima suis dentibus, ut ferro præcidat. Lutris etiam hominem mordet, nec desistit (ut ferunt) nisi fracti ossis crepitum senserit. Latæ pilus durus, specie inter pilum vituli marini et cervi.

* *Belon de la Nature des Poissons*, p. 28. pl. 29.

reader's patience, yet to neglect all notice of the admirable contrivance of its several properties and parts, would be frustrating the chief design of this work; that of pointing out the Divine Wisdom in the animal world.

Being a weak and most defenceless creature, it is endued, in a very distinguished degree, with that preserving passion, fear; this makes it perpetually attentive to every alarm, and keeps it always lean. To enable it to receive the most distant notices of dangers, it is provided with very long ears, which (like the tubes made use of by the deaf) convey to it the remotest sounds. Its eyes are very large and prominent, adapted to receive the rays of light on all sides. To assist it to escape its pursuers by a speedy flight, the hind legs are formed remarkably long, and furnished with strong muscles; their length gives the hare



when hunted, are so well known to every sportsman, as not to deserve mention, except to awaken their attention to those faculties nature has endowed it with; which serve at the same time to increase their amusement, as well as to prevent the animal's destruction. It very rarely leaves its form or seat in the day, but in the night takes a circuit in search of food, always returning through the same meuses, or passes.

The color approaches very near to that of *Color*. the ground, which secures it more effectually from the sight of men, and of beasts and birds of prey. Providence has been so careful in respect to the preservation of the species of animals, as to cause in northern countries these as well as many others to change color, and become white at the beginning of winter, to render them less conspicuous amidst the snow. Accidental instances of white hares are met with in *South Britain*.

Hares differ much in size: the smallest are in the isle of *Ilay*: the largest in that of *Man*, where some have been found to weigh twelve pounds.

Its food is entirely vegetable, and it does *Food*. great injury to nurseries of young trees, by

eating the bark: it is particularly fond of pinks, parsley, and birch.

The hare never pairs, but in the rutting season, which begins in *February*, the male pursues and discovers the female, by the sagacity of its nose. The female goes with young one month, brings usually two young at a time, sometimes three, and very rarely four. Sir *Thomas Brown*, in his treatise on vulgar errors,* asserts the doctrine of superfetation; i. e. a conception upon conception, or an improvement on the first fruit before the second is excluded, and he brings this animal as an instance; asserting, from his own observation, that after the first cast there remain successive conceptions, and other younglings very immature, and far from the term of their exclusion; but as the hare breeds very frequently in the year, there is no necessity of har-

ludes to it in the fourth satire of the second book.

Fœcundi leporis sapiens sectabitur armos,
says the *bon vivant*, “every man of taste will
“prefer the wing of the fruitful hare.” *Pliny*
as a philosopher is more explicit, and assigning
a moral reason for the great encrease of this
animal gives the following elegant account of
it. *Lepus omnium prædæ nascens, solus præter*
Dasypodem superfætat, aliud educans, aliud, in
utero pilis vestitum, aliud implume, aliud inchoa-
tum gerens pariter.

Hares are very subject to fleas; *Linnæus* tells
us, that the *Dalecarlians* make a sort of cloth
of the fur, called *filt*; which, by attracting
those insects, preserves the wearer from their
troublesome attacks.* The hair of this crea-
ture forms a great article in the hat manufac-
ture; and as this country cannot supply a suf-
ficient number, vast quantities are annually
imported from *Russia* and *Siberia*.

The hare was reckoned a great delicacy
among the *Romæns*;† the *Britons*, on the con-

* *Faun. Suec.* 25.

† *Inter aves turdus, si quid me iudice verum:*

Inter quadrupeds gloria prima Lepus. Martial. 13. 92.

trary, thought it impious even to taste it;* yet this animal was cultivated by them, either for the pleasure of the chase, or for the purposes of superstition, as we are informed that *Boadicea*, immediately before her last conflict with the *Romans*, let loose a hare she had concealed in her bosom, which taking what was deemed a fortunate course, animated her soldiers by the omen of an easy victory over a timid enemy.†

21. *Varying*. *Lepus hieme albus*. *Forster hist.* Alpine Hare. *Hist. quad. nat. Volgæ. Ph. Tr.* LVII. 343. ii. No. 300. p. 100.
Lepus variabilis. *Pallas nov. Arct. Zool.* i. 108.
sp. 1. Gm. Lin. 161.

THE Varying hare inhabits the summits of the highland mountains, never descends into the vales, or mixes with the common species



the loftiest situations : does not run fast, and if pursued is apt to take shelter beneath stones or in clefts of rocks; is easily tamed, and is very sprightly and full of frolick; is fond of honey, and carraway comfits, and is observed to eat its own dung before a storm.

It is less than the common hare, weighing only 6lb. $\frac{1}{2}$. whereas the first weighs from eight to twelve pounds. Its hair is soft and full; the predominant color grey mixed with a little black and tawny.

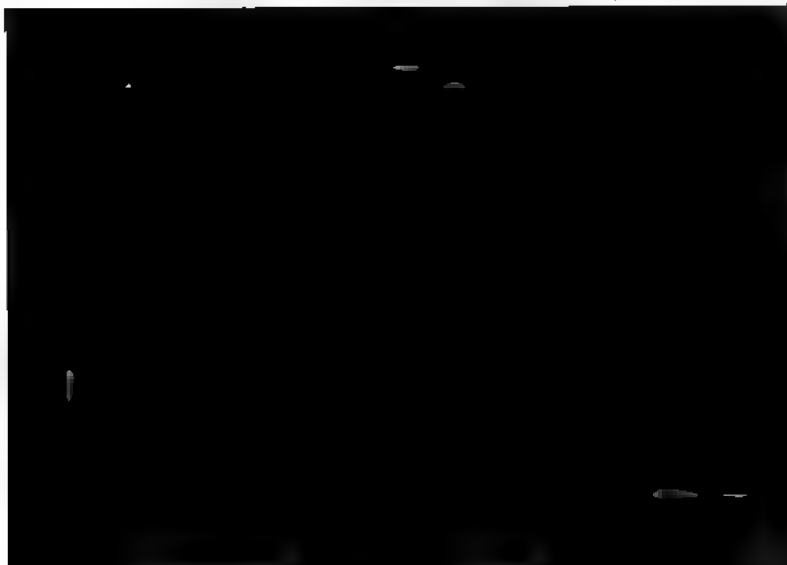
This is its summer's dress; in winter it entirely changes to a snowy whiteness except the edges and tips of the ears which retain their blackness. The alteration of color begins in *September*, and first appears about the neck and rump; in *April* it again resumes its grey coat. This is the case in *Styria*,* but in the polar tracts such as *Greenland* it never varies from white, the eternal color of the country. In the intermediate climates between temperate and frigid, such as *Scotland* and *Scandinavia*, it regularly experiences these vicissitudes of color.

* *Kramer Austr.* 515.

22. *Rabbit. Cuniculus.* The Rabbit or *Lepus Cuniculus. Gm. Lin.*
Cony. Raisyn. quad. 205. 163.
Meyer's an. i. Tab. 83. Lepus cauda brevissima pa-
Germer quad. 362. pillis rubris. Faun. Suec.
Lepus caudatus, obscure 26.
cinereus. Brisson quad. Cuniculus terram fodiens;
95. Klein quad. 52.
De Buffon, Tom. vi. 303. Br. Zool. 43. Hist. quad.
Tab. 50, 51. ii. No. 302. p. 103.
- | | |
|-----------------------|-----------------------------------|
| <i>Brit. Cwningen</i> | <i>Germ. Koniglein, Kaniuchiu</i> |
| <i>Fren. Le Lapin</i> | <i>Dut. Konyn</i> |
| <i>Ital. Coniglio</i> | <i>Swed. Kavin</i> |
| <i>Span. Conejo</i> | <i>Dan. Kaniue.</i> |
| <i>Port. Coellio</i> | |

IT is well observed by *Pliny*, that nature
 ' hath shewed great kindness, in causing those
 ' things to be most prolific, that are the most
 ' harmless and the properest for our food.'*

This excellent observation of his, cannot be



the pigeon, whose increase, from one pair, may in four years amount to 14,760:* but rabbits will breed seven times a year, and bring eight young ones each time; on a supposition this happens regularly, during four years, their numbers will amount to 1,274,840. By this account, we might justly apprehend being overstocked with these animals, if they had not a large number of enemies which prevent the too great increase; not only men, but hawks, and beasts of prey, make dreadful havoc among the species. Notwithstanding these different enemies, we are told by *Pliny*, and *Strabo*, that they once proved so great a nuisance to the inhabitants of the *Balearic* islands, that they were obliged to implore the assistance of a military force from the *Romans*, in the time of *Augustus*, in order to extirpate them.† Their native country is *Spain*, where they were taken, as we do at present, by means of ferrets, which animals were first introduced there out of *Africa*:‡ they love a

* Vide *Swedish Essays*, translated by Mr. *Stillingfleet*, Ed. 1st. p. 75.

† *Plin.* lib. viii. c. 55.

‡ *Strabo*, iii. 144.

temperate and a warm climate, and are incapable of bearing great cold, so that in *Sweden** they are obliged to be kept in houses. Our *Fur*. country abounds with them; their furs form a considerable article in the hat manufactures, and of late, such part of the fur as is unfit for that purpose, has been found as good as feathers for stuffing beds and bolsters. Numbers of the skins are annually exported to *China*. The *English* counties that are most noted for these animals are *Lincolnshire*, *Norfolk*, and *Cambridgeshire*. *Methold*, in the last county, is famous for the best sort for the table; the soil there is sandy, and full of mosses and the *carices*. Rabbits swarm in the isles of *Orkney*, where their skins form a considerable article of commerce. Excepting otters, brown rats, common mice, and shrews, no other quadrupeds are found there. The rabbits of those isles are in general grey: those which inhabit the hills, grow hoary in winter.

Formerly the silver-haired rabbits were in great esteem for lining cloaths, and their skins sold at three shillings a piece;† but since the

* *Faun. Suec.* 25.

† *Hartlib's Legacy.*

introduction of the more elegant furs, the price is fallen to six-pence each. The *Sunk Island** in the *Humber* was once famous for a mouse-coloured species, now extirpated by reason of the injury it did to the banks by burrowing.

* *Ph. Trans.* No. 361.

GENUS XIII. SQUIRREL.

TOES four before ; five behind.

EARS tufted.

TAIL long cloathed with long hair.

23. *Common.* *Sciurus vulgaris.* *Rat.* *syn.* *batis*, palmis 4-dactylis
quad. 214. *plantis* 5-dactylis. *Gm.*
Meyer's an. i. *Tab.* 97. *Lin.* 145.
Gesner quad. 845. *Sciurus palmis solis saliens.*
Sciurus rufus, quandoque *Faun. Suec.* 37.
griseo admixto. *Brisson* *Sc. vulgaris rubicundus.*
quad. 104. *Klein quad.* 53.
De Buffon, Tom. vii. 258. *Br. Zool.* 44. *Hist. quad.*
Tab. 32. *ii. No.* 329. p. 138. *Arct.*
Sciurus auriculis apice bar. *Zool.* i. 142.

Brit. Gwiwair

Port. Ciuro




As long enough to cover the whole body, and as clothed with long hairs, disposed on each side horizontally, which gives it a great breadth. These serve a double purpose; when erected, they prove a secure protection from the injuries of heat or cold; when extended, they are very instrumental in promoting those vast leaps the animal takes from tree to tree. On the authority of *Klein* and *Linnaeus*, we may add a third application of the form of the tail; these naturalists tell us, that when the squirrel is disposed to cross a river, a piece of bark is the boat, the tail the sail.

This animal is remarkably neat, lively, active, and provident: never leaves its food to chance, but secures in some hollow tree a vast magazine of nuts for winter provision. In the summer it feeds on the buds and young shoots, and is particularly fond of those of the fir and pine, and also of the young cones. It makes its nest of the moss or dry leaves, between the fork of two branches, and brings four or five young at a time. Squirrels are in heat early in the spring, when it is very diverting to see the female feigning an escape from the pursuit of two or three males, and to observe the

various proofs they give of their agility, which is then exerted in full force.

Description The color of the whole head, body, tail, and legs of this animal, is a bright reddish brown; the belly and breast white; the ears are very beautifully ornamented with long tufts of hair, of a deeper color than those on the body; the eyes are large, black, and lively; the fore teeth, strong, sharp, and well adapted to its food; the legs are short and muscular; the toes long, and divided to their origin; the nails strong and sharp, in short, in all respects fitted for climbing, or clinging to the smallest boughs; on the fore-feet it has only four toes, with a claw in the place of the thumb or interior toe, on the hind feet there are five toes.

When it eats or dresses itself, it sits erect, covering the body with its tail, and making use of the fore-legs as hands. It is observed,



GENUS XIV. DORMOUSE.

TONGS four before; five behind.

EARS naked.

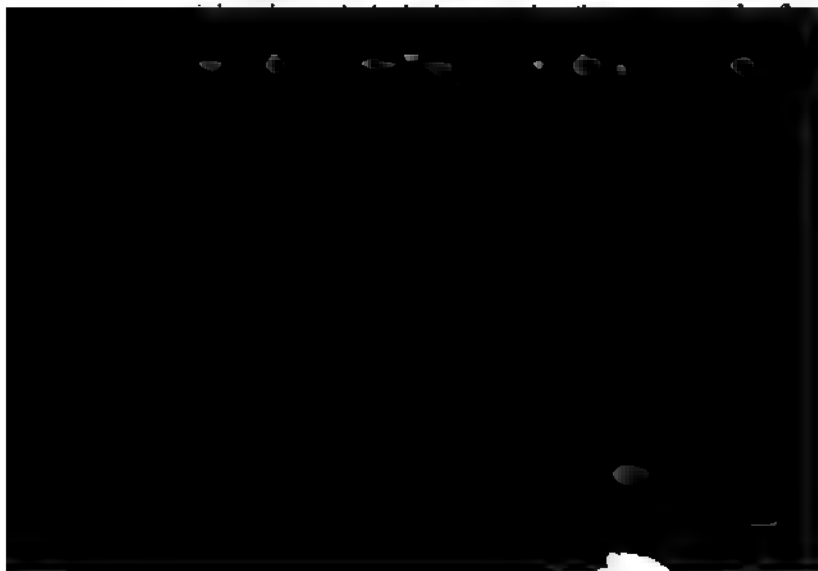
TAIL long covered with hair.

- | | |
|---|--|
| Mus avellanarum minor. | Myoxus Muscardinus. <i>Gm.</i> 24. <i>Dor-</i> |
| The Dormouse or Sleep- | <i>Lin.</i> 155. <i>mouse.</i> |
| er. <i>Raii syn. quad.</i> 220. | <i>Mus</i> cauda longa pilosa cor- |
| The Dormouse. <i>Edw.</i> 266. | pore rufo gulo albicante. |
| Gerner <i>quad.</i> 162. | <i>Faun. Suec.</i> 35. |
| Glis supra rufus infra albi- | <i>Br. Zool.</i> 45. <i>Hist. quad.</i> |
| cans. <i>Brisson quad.</i> 115. | ii. No. 359. p. 157. <i>Arct.</i> |
| De <i>Buffon</i> , Tom. viii. 193. | <i>Zool.</i> i. 149. |
| Tab. 26. | |
|
<i>Brit.</i> Pathew | <i>Span.</i> Liron |
| <i>Fren.</i> Le Muscardin, Croque- | <i>Germ.</i> Rothe, Wald-maus |
| noix, Rat-d'or | <i>Swed.</i> Skogsmus |
| <i>Ital.</i> Moscardino | <i>Dan.</i> Kassel-muus. |

THIS animal agrees with the squirrel in its food, residence, and in some of its actions: on first sight it bears a general resemblance to it, but on a closer inspection, such a difference may be discovered in its several parts, as vindicates *M. Brisson* for forming a distinct genus

of the Dormice, or *Glires*. These want the fifth claw on the interior side of their fore-feet, nor are their ears adorned with those elegant tufts of hair which distinguish the squirrel kind. These distinctions prevail in the other species, such as the *Lerot* and *Loir*.

Manners. Dormice inhabit woods, or very thick hedges, forming their nests in the hollow of some low tree, or near the bottom of a close shrub: as they want much of the sprightliness of the squirrel, they never aspire to the tops of trees, or, like it, attempt to bound from spray to spray; like the squirrel they form little magazines of nuts, &c. for winter provision, and take their food in the same manner, and same upright posture. The consumption of their hoard during the rigor of the season is but small, for they sleep most part of the time; re-



a mouse, but it has a plumper appearance, and the nose is more blunt; the eyes are large, black, and prominent; the ears are broad, rounded, thin, and semi-transparent: the forefeet are furnished with four toes; the hindfeet with five, but the interior toes of the hindfeet are destitute of nails: the tail is about two inches and a half long, closely covered on every side with hair: the head, back, sides, belly, and tail, are of a tawny red color; the throat white.

These animals appear seldom far from their retreats, or in any open place, for which reason they seem less common in *England* than they really are. They make their nests of *Nest.* grass, moss, and dead leaves, and bring usually three or four young at a time.

GENUS XV. RAT.

TOES four before; five behind.

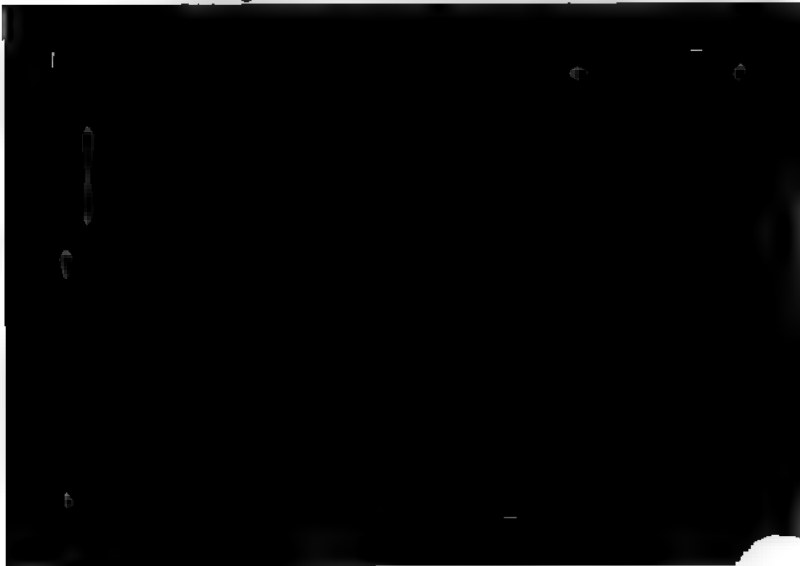
TAIL very slender; naked, or very slightly haired.

25. *Black.* *Mus domesticus major*, seu *Mus Rattus.* *Gm. Ltn.* 127.
Rattus. Raii syn. quad. 217. *Mus cauda longa subnuda*
Meyer's an. ii. Tab. 83. *corpore fusco cinerescen-*
Geener quad. 731. *te. Faun. Suec.* 33.
Mus cauda longissima ob- *Mus Rattus, mus castrina-*
scure cinereus. Brisson *rius. Klein quad.* 57.
quad. 118. *Dr. Zool.* 46. *Hist. quad.*
De Buffon, Tom. vii. p. 278. *ii. No. 373. p.* 176. *Arct.*
Tab. 36. *Zool.* i. 150.
- Brit.* *Llygoden ffrengig* *Germ.* *Ratz*
Fren. *Le Rat* *Dut.* *Rot*
Ital. *Ratto, Sorcio* *Swed.* *Rotta*
Span. *Raton, Rata* *Dan.* *Rotte.*

young game. Unfortunately for us it is a domestic animal, always residing in houses, barns, or granaries, and nature has furnished it with fore-teeth of such strength, as enable it to force its way through the hardest wood, or oldest mortar. It makes a lodge, either for its day's residence, or a nest for its young, near a chimney, and improves the warmth by forming in it a magazine of wool, bits of cloth, hay or straw. It begins to breed under the age of one year, and goes with young about six weeks, breeds frequently in the year, and brings about six or seven young at a time. They increase so fast, as to over-stock their abode; which often forces them, through deficiency of food, to devour one another: an unnatural disposition which happily prevents even the human race from becoming a prey to them: not but that there are instances of their gnawing the extremities of infants in their sleep.

The greatest enemy the rats have is the weasel; which makes infinitely more havoc among them than the cat; for the weasel is not only endowed with superior agility, but, from the form of its body, can pursue them through all their retreats which are imper-

is an animal quite unknown in *Scandinavia*, as we have been assured by several natives of the countries which form that tract, and *Linnaeus* takes no notice of it in his last system. It is fit here to remark an error of that able naturalist in speaking of the common rat, which he says was first brought from *America* into *Europe* by means of a ship bound to *Antwerp*. The fact is, that both rat and mouse were unknown to the new world before it was discovered by the *Europeans*, and the first rats it ever knew, were introduced there by a ship from *Antwerp*.* This animal never made its appearance in *England* till about forty years ago.† It has quite extirpated the common kind wherever it has taken its residence, and it is to be feared that we shall scarcely find any benefit by the change: the *Norway* rat having the same disposition, with greater abilities for doing mischief, than



the Hindwys, it preys on rabbits, poultry, and all kind of game, and on grain and trees. It breeds most amazingly, producing from sixteen to eighteen young at a time, and breeds three times in the year. Its bite is not only severe, but dangerous, the wound being immediately attended with a great swelling, and is a long time in healing. These rats are so bold, as sometimes to turn upon those who pursue them, and fasten on the stick or hand of such as offer to strike them.

M. Brisson describes this same animal twice under different names, p. 170 under the title *le rat du bois*; and again, p. 173 under that of *le rat de norcege*. M. de Buffon styles it *le Stornulat*; as resembling the mulots, or field mice, in many respects; but exceeding them in bulk.

I suspect that this rat came in ships originally from the *East Indies*. They are found there and also in vast numbers in *Persia*, from whence they have made their way westerly even to *Petersburg*.

27. *Water. Le Rat d'Eau. Belon 30. De Buffon, Tom. vii. 348. pl. 31. Tab. 43.*

Mus major aquaticus, seu Mus amphibius. Mus cauda Rattus aquaticus. Rati elongata pilosa plantis syn. quad. 217. palmatis. Gm. Lin. 132.

Sorex aquaticus. Charlton Castor cauda lineari toreti. ex. 25. Faun. Succ. 25. Ed. 1.

Meyer's an. ii. Tab. 84. Mus amphibius 52. Ed. 2.

Mus cauda longa pills supra Mus aquaticus. Klein quad. ex nigro et flavescente 87.

mixtis, infra cinereis ves. Br. Zool. 48. Hist. quad. titus. Brisson quad. 124. ii. No. 380. p. 182. Arct. Zool. i. 152.

Brit. Llygoden y dwfr Germ. Wassermause. W. Rat.

Fren. Le Rat d'eau Dut. Water-rot

Ital. Sorgo mörngange Swed. Wain-ratta

Span. Dan. Vand-rotte.

Port.

LINNÆUS from the external appearance



which he found it, in the system of our illustrious countryman *Ray*.

The water-rat never frequents houses, but *Manners*, is always found on the banks of rivers, ditches and ponds, where it burrows and breeds. It feeds on small fish, or the fry of greater, on frogs, insects, and sometimes on roots; it has a fishy taste, and in some countries is eaten; *M. de Buffon* informing us that the peasants in *France* eat it on *maigre* days.

It swims and dives admirably well, and continues long under water, though the toes are divided like those of the common rat; not connected by membranes, as *Mr. Ray* imagined, and as *Linnaeus*, and other writers, relate after him.

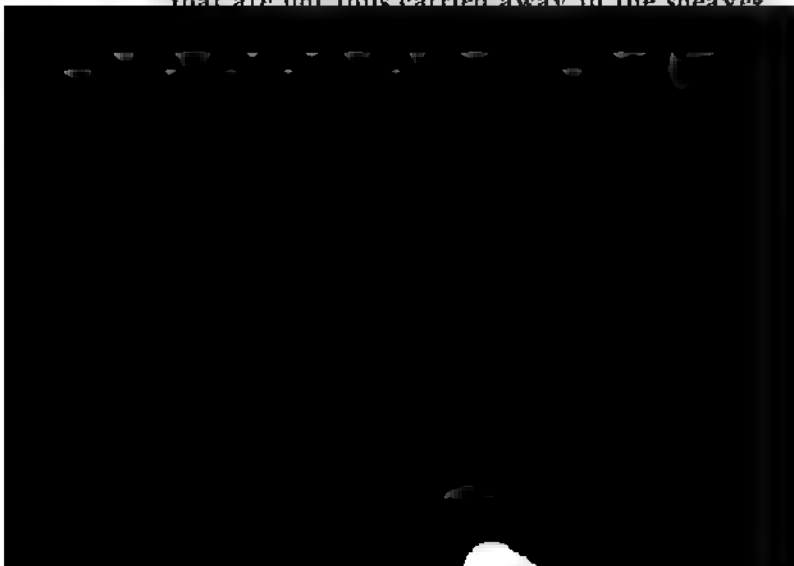
The male weighs about nine ounces: the *Description*, length is seven inches from the end of the nose to the tail; the tail five inches: on each foot are five toes, the inner toe of the fore-foot is very small; the first joint of the latter is very flexible, which must greatly assist it in swimming, and forming its retreat. The head is large, the ears small, and scarcely appear through the hair; the nose blunt, and the eyes little: the teeth large, strong and yellow: the

- 20. Harvest.* *Test* long-tailed field mouse. *cauda longa subpilosa, aur-*
Br. Zool. ii. *App.* 498. *Hist.* *ricularis vellere longioribus.*
quad. ii. *No.* 384. p. 185. *Shaw's Gen. Zool.* ii p. 62.
Mus messorius. *M. supra* *Linn. Tr.* vii. 274.
ferrugineus, subtus albus, *White's Selborne,* 33, 39.

THIS species is very numerous in *Hampshire*, particularly during harvest.

Manners. They form their nest above the ground, between the straws of the standing corn, and sometimes in thistles; it is of a round shape, and composed of the blades of corn. They bring about eight young at a time.

They never enter houses, but are often carried in the sheaves of corn into ricks, and a hundred of them have been found in a single rick, on pulling it down to be housed. Those that are not thus carried away in the sheaves



CLASS I. COMMON MOUSE. 177

ounce. They are more slender than the other long-tailed Field Mouse; their eyes less prominent; their ears naked, and standing out of the fur; their tail slightly covered with hair; their back of a fuller red than the larger species; inclining to the color of a Dormouse: the belly white; a strait line along the sides dividing the colors of the back and belly.

<i>Mus domesticus vulgaris</i> , seu minor. <i>Raii syn. quad.</i> 218.	<i>Mus musculus. M. cauda 30. Mouse.</i>
<i>Seb. Museum</i> , i. <i>Tab.</i> 111.	elongata, subnuda, palmis <i>Common.</i>
f. 6. its skeleton. <i>Tab.</i> 31.	tetradactylis, plantis pentadactylis, pollice mutico.
<i>Gesner quad.</i> 714.	<i>Gm. Lin.</i> 128.
<i>Mus cauda longissima obscure cinereus</i> , ventre subalbescente. <i>Brisson quad.</i> 119.	<i>Faun. Suec.</i> 34.
<i>De Buffon</i> , <i>Tom.</i> vii. 309.	<i>Mus minor, Musculus vulgaris. Klein quad.</i> 57.
	<i>Br. Zool.</i> 50. <i>Hist. quad.</i> ii. No. 382. p. 184. <i>Arct. Zool.</i> i. 152.
<i>Brit.</i> Llygoden	<i>Germ.</i> Maus
<i>Fren.</i> La Souris	<i>Dut.</i> Muys
<i>Ital.</i> Topo, sorice	<i>Swed.</i> Mus
<i>Span.</i> Raton	<i>Dan.</i> Muus.
<i>Port.</i> Ratinho	

THIS timid, cautious, active little animal, is too well known to require a description; it

178 MEADOW MOUSE. CLASS I.

is entirely domestic, being never found in fields, or, as M. Buffon observes, in any countries uninhabited by mankind. It breeds very frequently in the year, and brings six or seven young at a time. This species is often found of a pure white, in which state it makes a most beautiful appearance, the fine full eye appearing to great advantage, amidst the snowy color of the fur. The root of white hellebore and staves-acre, powdered and mixed with meal, is a certain poison to them.

31. *Meadow*. *Mus arvalis*. M. cauda unciali, auriculis vellere prominulis, palmis subtredactylis, corpore fusco. Gm. *Lin.* 134. *Mus agrestis capite grandi brachium. Rat.* syn. quad. 218. *Mus arvalis in dorso et saturate cinereis in ventre vestitis. Brisson quad.* 125. *Mus agrestis. Famn. Sæc.* 80. *De Buffon, Tom.* vii. 369. *Tab.* 47. *Klein quad.* 57. No. 50. *Br. Zool.* 50. *Hist. quad.* ii. No. 109. p. 305. *Art.*



inch and a half; the head is very large; the eyes prominent; the ears quite hid in the fur; the whole upper part of the body is of a ferruginous color, mixed with black; the belly of a deep ash-color: the tail is covered with short hair, ending with a little bush, about a quarter of an inch long. The legs, particularly the fore legs, very short.

This animal makes its nest in moist meadows, and brings eight young at a time: it has a strong affection for them; one that was seduced into a wire trap, by placing its brood in it, was so intent on fostering them, that it appeared quite regardless of its captivity. The manners of this creature much resemble the 28th species: like it, this resides under ground, and lives on nuts, acorns, but particularly on corn; it differs from the former in the place of its abode, seldom infesting gardens. It has been observed that in housing a rick of corn, the dogs have devoured all the mice of this species that they could catch, and rejected the common kind, and that the cats on the contrary would touch none but the last.

GENUS XVI. SHREW.

TEETH cutting, pointing forward.

NOSE long, slender.

EARS small.

TOES five on each foot.

32. *Fetid.* *Mus araneus*. Shrew, Shrew Mouse, or Hardy Shrew. *Rati syn. quad.* 239. *Gesner quad.* 747. *Mus araneus supra ex fusco rufus infra albicans. Brisson quad.* 126. *De Buffon, Tom. viii.* 57. *Tab.* 10. *Sorex araneus. S. cauda mediocri, corpore subtus albid.* *Gm. Lin.* 114. *Faun. Suec.* 24. *Mus araneus rostro productiore. Klein quad.* 58. *Br. zool.* 54. *Hist. quad.* ii. *No.* 428. p. 224. *Arct. zool.* i. 161. *Brit. Llygoden goch, Chwistlen, Llyglen, La Musataigne. Port. Germ. Spitzmause, Zissmause, Muger.*

slender, and the upper part is much longer than the lower, beset with long but fine whiskers; the ears are short, and rounded; the eyes are very small, and, like those of the mole, almost concealed in the hair. The color of the head, and upper part of the body, is of a brownish dusky red; the belly of a dirty white; the tail is covered with short dusky hairs; the legs are very short; the feet are divided into five toes. Above and below are two slender cutting teeth pointing forward, and on each a minute process; the rest of the teeth are so closely united, as to appear a continued serrated bone in every jaw; the whole number is twenty eight.

The shrew inhabits old walls, heaps of *Manners*. stones, and holes in the earth; is frequently found near hayricks, dunghills, and necessary houses; is often observed rooting like a swine in ordure: it lives on corn, insects, and any filth; from its food, or the places it frequents, has a disagreeable smell; cats will kill but not eat it. Brings four or five young at a time. In *August* there is an annual mortality of them, numbers being in that season found dead in the paths. The antients believed

them to be injurious to cattle, an error now detected.

33. *Water.* *Sorex fodiens*. *S. canda me-* *Sorex fodiens, Pallas ined.*
diocri subunda, corpore *Linn. Tr. vii. 276,*
nigricante subtus cinereo, *La Musaraigne d'Eau, de*
digitis ciliatis. Gm. Lin. *Buffon. Tom. viii. 64.*
113, *Water Shrew, Hist. quad.*
Mus araneus dorso nigro *ii. No. 429, p. 225,*
ventreque albo. Merret
Pinas. 167.

Manners.

THIS species inhabits the banks of ditches, and other wet situations, and is in some places called the Blind Mouse, from the smallness of its eyes. The *Germans* call it *Gräber* or digger. I imagine it to be the same which the inhabitants of *Sutherland* call the water mole, and those of *Cathness*, the *Lavellan*, which the last imagine poisons their cattle, and is held

Its length from nose to tail is three inches *Description* and three quarters; the tail two inches: the nose long and slender; ears minute; eyes very small and hid in the fur; the color of the head and upper part of the body black; the throat, breast and belly ash-color; beneath the tail is a triangular dusky spot.

[An animal of this genus, but different from the Water Shrew in some respects, was found in a ditch near *Norfolk*, by *W. J. Hooker*, esq. The color, an uniform greyish black; a fringe of short white hairs on the under side of the the tail; the rest of the tail black, except the tip, which is white; the legs and toes fringed underneath with white hairs.]—ED.

GENUS XVII. MOLE.

NOSE long, slender.

JAW upper, much longer than the lower.

EARS none.

FORE-FEET very broad, with scarcely any apparent legs before: hind-feet very small.

34. *Euro.* Talpa. The Mole, Mole-*De Buffon, Tom. viii. 81.*
pean. Warp, or Want. *Rati Tab. 12.*
syn. quad. 236. Talpa europea. T. cauda
Meyer's an. i. Tab. 2. brevi, pedibus pentadac-
 Talpa alba nostras. *Sed. tyllis. Gm. Lin. 110.*
Alus. i. p. 61. Tab. 32. f. i. *Faun. Suec. 23.*
Sib. Scot. 11. Talpa. *Klein quad. 60.*
Geener quad. 931. *Br. Zool. 52. Hist. quad. 11.*
 Talpa caudata nigricans pe- *No. 440. p. 229. Arct.*
 dibus anticis et posticis *Zool. i. 164.*
 pentadactylis. *Brisson*
quad. 203.

every article of the creation, even to the most apparently contemptible, by adapting the parts to its destined course of life, appears more evident in the mole than in any other animal.

A subterraneous abode being allotted to it, the seeming defects of several of its parts vanish; which, instead of appearing maimed, or unfinished, exhibit a most striking proof of the fitness of their contrivance. The breadth, strength, and shortness of the fore-feet, which are inclined sideways, answer the use as well as form of hands, to scoop out the earth, to form its habitation, or to pursue its prey. Had they been longer, the falling in of the earth would have prevented the quick repetition of its strokes in working, or have impeded its course; the oblique position of the fore-feet has also this advantage, that it flings all the loose soil behind the animal.

The form of the body is not less admirably contrived for its way of life; the fore-part is thick and very muscular, giving great strength to the action of the fore-feet, enabling it to dig its way with amazing force and rapidity, either to pursue its prey, or elude the search of the most active enemy. The form of its

hind parts, which are small and taper, enables it to pass with great facility through the earth, that the fore-feet had flung behind; for had each part of the body been of equal thickness, its flight would have been impeded, and its security precarious.

The skin is most excessively compact, and so tough as not to be cut but by a very sharp knife; the hair is very short, and close set, and softer than the finest silk; the usual color is black, not but that there are instances of these animals being spotted,* and a creme colored breed is sometimes found in my lands near *Downing*.

The smallness of the eyes (which gave occasion to the antients to deny it the sense of sight,)† is to this animal a peculiar happiness; a small degree of vision is sufficient for an animal ever destined to live under ground;



them very small, but also covered them very closely with fur. Anatomists mention (besides these), a third very wonderful contrivance for their security, and inform us that each eye is furnished with a certain muscle, by which the animal has the power of withdrawing or exerting them, according to its exigencies.

To make amends for the dimness of its sight, the mole is amply recompensed, by the great perfection of two other senses, those of hearing and of smelling; the first gives it notice of the most distant approach of danger; the other, which is equally exquisite, directs it in the midst of darkness to its food: the nose also, being very long and slender, is well formed for thrusting into small holes, in search of the worms and insects that inhabit them. These gifts may with reason be said to compensate the defect of sight, as they supply in this animal all its wants, and all the purposes of that sense. Thus amply supplied as it is, with every necessary accommodation of life, we must avoid assenting to an observation of a most respectable writer, and only refer the reader to the note, where he may find the very words of that author, and compare them with those

of our illustrious countryman, Mr. Ray.*

It is supposed that the verdant circles so often seen in grass grounds, called by country people *fairy rings*, are owing to the operations of these animals, who at certain seasons perform their burrowings by circumgyrations, which loosening the soil, give the surface a greater fertility and rankness of grass than the other parts within or without the ring.

The mole breeds in the spring, and brings four or five young at a time; it makes its nest of moss, and that always under the largest hillock, a little below the surface of the ground. It is observed to be most active, and to cast up most earth, immediately before rain, and

* La taupe, sans être aveugle, a les yeux si petits, si couverts, qu'elle ne peut faire grand usage du sens de la vue: en dédommagement la nature lui a donné avec magnificence l'usage du sixième sens, &c.



in the winter before a thaw, because at those times the worms and insects begin to be in motion, and approach the surface; on the contrary, in very dry weather, this animal seldom or never forms any hillocks, as it penetrates deep after its prey, which at such seasons retires far into the ground. During summer it runs in search of snails and worms in the night time among the grass, which makes it the prey of owls. The mole shews great art in skinning a worm, which it always does before it eats it; stripping the skin from end to end, and squeezing out all the contents of the body.

These animals do incredible damage in gardens, and meadows, by loosening the roots of plants, flowers, grass, corn, &c. *Mortimer* says, that the roots of *Palma christi* and white hellebore, made into paste, and laid in their holes, will destroy them. They seem not to have many enemies among other animals, except in *Scotland*, where (if we may depend on *Sir Robert Sibbald*) there is a kind of mouse, with a black back, that destroys moles.* We have been assured that moles are not found in *Ireland*.

* *Sib. Hist. Scot.* Part iii. p. 12. I did not find it was known at present.

GENUS XVIII. URCHIN.

Tons five on each foot.

Body covered with short strong spines.

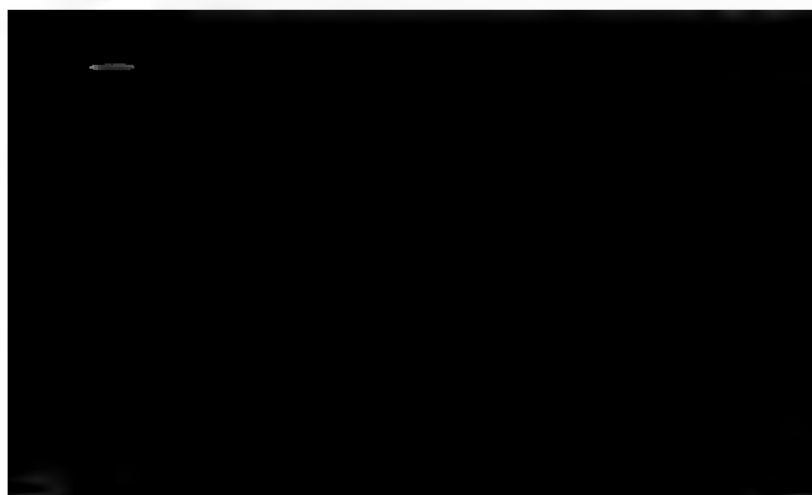
35. *Common* Echinus sc. erinaceus terres- Echinus terrestris. *Gesner*
 tria. *Raii syn. quad.* 231. *quad.* 368.
 Mayer's an. i. Tab. 95, 96. Erinaceus europæus. *Gm.*
 Sib. Scot. 11. *Lin.* 75.
 Erinaceus parvus nostras. Erinaceus spinosus auricu-
 Sab. Mus. i. p. 78. *Tab.* latus. *Fawn. Succ.* 82.
 40. f. 1, 2. Acanthion vulgaris nostras.
 Erinaceus auriculis erectis. *Klein quad.* 66.
 Brisson quad. 128. *Br. Zool.* 51. *Hist. quad.* 11.
De Buffon, Tom. viii. 28. *No.* 446. p. 234. *Arct.*
 Tab. 6. *Zool.* i. 165.
- Brit.* Draenog. Draenycod *Germ.* Igel
Fren. L'Herisson *Dut.* Fegel-varken
Ital. Riccio *Swed.* Igelhot
Span. Erizo *Dan.* Pin-suln, Pin-soe.
Port. Ourizo

lower, and the end flat; the nostrils are narrow, terminated on each side by a thin loose flap; the color of the nose is dusky, it is covered by a few scattered hairs; the upper part of the head, the sides, and the rump, are clothed with strong stiff hairs, approaching the nature of bristles, of a yellowish and cinereous hue. The legs are short, of a dusky color, and almost bare; the toes on each foot are five in number, long, and separated the whole way; the thumb, or interior toe, is much shorter than the others; the claws long, but weak; the whole upper part of the body and sides are closely covered with strong spines, of an inch in length, and very sharp pointed; their lower part is white, the middle black, the points white. The eyes are small, and placed high in the head; the ears are round, pretty large, and naked. The mouth is small, but well furnished with teeth; in each jaw are two sharp pointed cutting teeth; in the upper jaw are on each side four tushes, and five grinders; in the lower jaw on each side are three tushes, pointing obliquely forward; and beyond those, four grinders.

The hedge hog is a nocturnal animal, keep- *Manners.*

ing retired in the day, but is in motion the whole night, in search of food. It generally resides in small thickets, in hedges, or in ditches covered with bushes, lying well wrapped up in moss, grass, or leaves. Its food is roots, fruits, worms, and insects: it lies under the undeserved reproach of sucking cattle, and hurting their udders, but the smallness of its mouth renders that impossible.

It is a mild, helpless, and patient animal, and would be liable to injury from every enemy, had not Providence guarded it with a strong covering, and a power of rolling itself into a ball, by that means securing the defenceless parts. The barbarity of anatomists furnishes us with an amazing instance of its patience; one that was dissected alive, and whose feet were nailed down to the table, endured that, and every stroke of the operator's knife, without even one groan.*



DIV. III. PINNATED.

WITH fin-like feet; fore legs buried deep in the skin; hind legs pointing quite backwards.

GENUS XIX. SEAL.

TEETH in the upper jaw, six, pointed; in the lower jaw, four, rather blunt.

TOES five palmated on each foot.

BODY thick at the shoulders, tapering towards the tail.

Sea calf. *Ph. Trans.* ix. 74. Utsuk? *Crantz Greenl.* i. 36. *Great.*
Tab. 5. 125.

Le grand Phoque. *De Buf-* Great seal. *Hist. quad.* ii.
fon, Tom. xiii. 345. *No.* 478. p. 277. *Arct.*

Phoca barbata. *Gm. Lin.* 65. *Zool.* i. 185.

A SPECIES not very uncommon on the coast of *Scotland*, particularly about the rock *Hiskyr*, one of the western isles, where it grows

to the length of twelve feet. One was some years ago shewn in *London*, and notwithstanding it was so young as to have scarcely any teeth, yet it was seven feet and a half long.

In my voyage among the *Hebrides* I frequently heard of this species, but did not meet with it. Mr. *Thompson*, our master, shot one, but it sunk, and we lost it.



Le Veau marin, ou loup de Mer. <i>Belon</i> 26. Pl. 26.	Le Phoque. <i>De Buffon</i> , 37. <i>Common</i> Tom. xiii. 333. Tab. 45.
Seal, Seoile, or Sea-calf.	<i>Horr. Icel.</i> 88.
Phoca, seu vitulus marinus. <i>Rati syn. quad.</i> 189.	<i>Pontop. Norw.</i> ii. 125.
Sea-calf. <i>Phil. Trans.</i> No. 469. Tab. 1. <i>Abridg.</i> xlvii.	<i>Brisson quad.</i> 162.
Smith's Kerry, 84, 364.	<i>Phoca vitulina.</i> <i>Gm. Lin.</i> 63.
Borlase's Cornw. 284.	<i>Phoca.</i> <i>Klein quad.</i> 93.
Worm. muse. 289.	<i>Phoca dentibus caninis rec-</i>
Kassigiak. <i>Crantz's hist.</i>	<i>tis. Faun. Suec.</i> 4.
Greenl. i. 123.	<i>Br. Zool.</i> 34. <i>Hist. quad?</i>
	ii. No. 470. p. 270. <i>Arct.</i>
	<i>Zool.</i> i. 175.

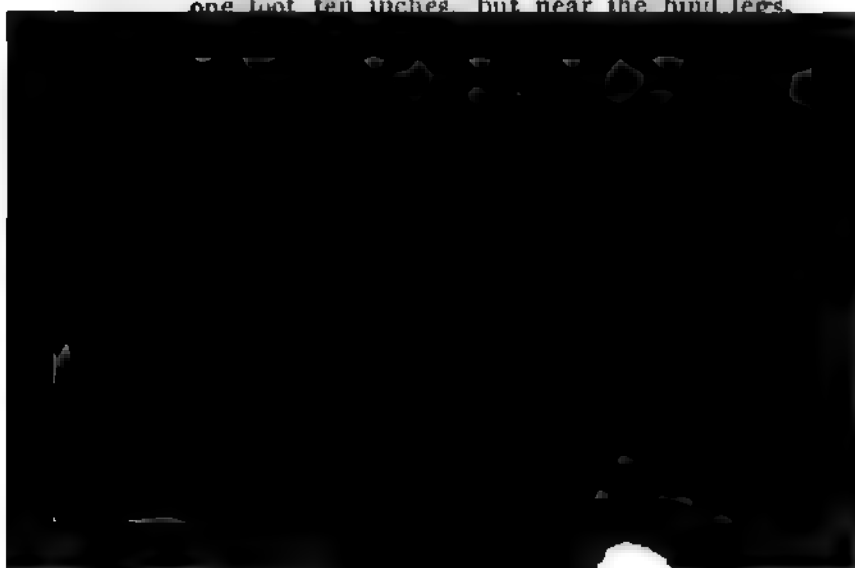
Brit. Moelrhon	Germ. Meer wolff, Meer hund
Fren. Le Veau marin	Dut. Zee hond
Ital. Vechio marino	Swed. Sial
Span. Lobo marino	Dan. Sæl hund.

THE common length of those taken on the *Description* British coasts, is from five to six feet.

The subject that we took our description from, was a young one; allowance must therefore be made for the proportions of the measurements of those that have attained their full size. Its length, from the end of the nose to the end of the hind feet, was two feet nine inches, to the end of the tail, two feet three inches; the tail two and a half; the fore legs

were deeply immersed in the skin of the body; what appeared out, was only eight inches long; the breadth of the fore feet, when extended, was three inches and a half; the hind legs were placed in such a manner, as to point directly backwards, and were ten inches long; each hind foot, when extended, was nine inches and a half broad; every foot was divided into five toes; and each of these connected by a strong and broad web, covered on both sides with short hair. The toes were furnished with strong claws, well adapted to assist the animal in climbing the rocks it basked on; the claws on the hind feet were about an inch long, slender, and strait, except at the ends, which were a little incurvated.

The circumference of the body in the thickest part, which was near the shoulders, was one foot ten inches, but near the hind legs,



and above each eye, were a few of the same kind. The form of the tongue of this animal is so singular, that were other notes wanting, that alone would distinguish it from all other quadrupeds, being forked, or slit at the end. The cutting teeth are singular in respect to their number, being six in the upper jaw, and only four in the lower. It has two canine teeth above and below, and on each side of the jaws five grinders; the total thirty-four.

The whole animal was covered with short hair, very closely set together; the color of that on the head and feet was dusky; on the body dusky, spotted irregularly with white; on the back the dusky color predominated, on the belly white, but seals vary greatly in their marks and colors, and some have been found* entirely white.

The seal is common on most of the rocky shores of *Great Britain* and *Ireland*, especially on the northern coasts; in *Wales* it frequents the coasts of *Caernarvonshire*, and *Anglesey*. It preys entirely on fish, and never molests the sea fowl; for I have seen numbers of each

* In the *Ashmolean Museum* at *Oxford*, is a good picture of two white seals.

floating on the waves, as if in company. Seals eat their prey beneath the water, and in case they are devouring any very oily fish, the place is known by a certain smoothness of the waves immediately above. The power of oil in stilling the waves excited by a storm, is mentioned by *Pliny*; the moderns have made the experiment with success,* and by that made one advance towards eradicating the vulgar prejudices against that great and elegant writer.

We must acknowledge the obligations we were under to the Rev. Mr. *Farrington* of *Dinas*, in *Cuernarvonshire*, for several learned communications, but in particular for the natural history of this animal, which we shall give the public in his own words.

Manners. ' The seals are natives of our coasts, and are
' found most frequently between *Llyn* in *Caer-*
' *narvonshire*, and the northern parts of *Angle-*



' bious animal is *Phoca*;* the vulgar name is
' sea calf, and on that account, the male is
' called the bull, and the female the cow, but
' the *Celtic* appellation is *Moelrhon*, from the
' word *Moel*, bald, or without ears, and *Rhon*,
' a spear or lance.

' They are excellent swimmers, and ready
' divers, and are very bold when in the sea,
' swimming carelessly enough about boats;
' their dens or lodgements are in hollow rocks,
' or caverns, near the sea, but out of the reach
' of the tide: in the summer they will come out
' of the water, to bask or sleep in the sun, on
' the top of large stones, or shivers of rocks,
' and that is the opportunity our countrymen
' take of shooting them; if they chance to
' escape, they hasten towards their proper ele-
' ment, flinging stones and dirt behind them,
' as they scramble along; at the same time
' expressing their fears by piteous moans, but
' if they happen to be overtaken, they will
' make a vigorous defence with their feet and
' teeth, till they are killed. They are taken

* Doctor *Charleton* derives the word *φωκη* ex *βωκη*,
beatu quem edit: vide *Exercitationes de dif. An. pisc.* p.
48. But I do not find any authority for his opinion.

‘ for the sake of their skins, and for the oil that
‘ fat yields; the former sell for four shillings,
‘ or four and six-pence a piece, which, when
‘ dressed, are very useful in covering trunks,
‘ making waistcoats, shot pouches, and several
‘ other conveniencies.’

The flesh of these animals, and even of porpoises, formerly found a place at the tables of the great, as appears from the bill of fare of that vast feast that archbishop *Nevill* gave in the reign of *Edward IV.* in which is seen, that several were provided on the occasion.* They couple about *April*, on large rocks, or small islands, not remote from the shore, and bring forth in those vast caverns that are frequent on our coasts; they commonly produce two at a time, which in their infant state are covered with a whitish down, or woolly substance. The



of seals in the breeding time; where they continue till their young are old enough to go to sea, which is in about six or seven weeks. The first of these caves is near the *Ord*, the last near *Thrumster*; their entrance so narrow; as only to admit a boat; their inside very spacious and lofty. In the month of *October*, or the beginning of *November*, the seal-hunters enter the mouths of the caverns about mid-night, and rowing up as far as they can, they land; each of them being provided with a bludgeon, and properly stationed, light their torches, and make a great noise, which brings down the seals from the farther end in a confused body with fearful shrieks and cries; at first the men are obliged to give way for fear of being overborne, but when the first crowd is past, they kill as many as straggle behind, chiefly the young, by striking them on the nose; a very slight blow on that part dispatches them. When the work is over, they drag the seals to the boat, which two men are left to guard. This is a most hazardous employ, for should their torches go out, or the wind blow hard from the sea during their continuance in the cave, their lives are lost. The seals of six weeks old,

yield more oil than their associated dogs;—above eight gallons have been procured from a single whelp, which sells from six-pence to nine-pence per gallon; the skins from six-pence to twelve-pence.

The natural history of this animal may be further elucidated by the following extracts from a letter of the Rev. Dr. *William Barlow*, dated *Oxford the 24th, 1763*.

‘ The seals are seen in the greatest plenty
 ‘ on the shores of *Curzon*, in the months of
 ‘ *May, June, and July*. They are of different
 ‘ sizes; some as large as a cow, and from that
 ‘ downwards to a small calf. They feed on most
 ‘ sorts of fish which they can master, and are
 ‘ seen searching for their prey near shore, where
 ‘ the whistling fish, wrasse, and pollocks resort.
 ‘ They are very swift in their proper depth of



— no way to escape, but by running into shoal
— water; the seal pursued, and the former, to
— get more surely out of danger, threw itself
— on its side, by which means it darted into
— shoaler water than it could have swam in
— with the depth of its paunch and fins, and so
— escaped.

‘ The seal brings her young about the be-
‘ ginning of autumn; our fishermen have seen
‘ two sucking their dam at the same time, as
‘ she stood in the sea in a perpendicular posi-
‘ tion.

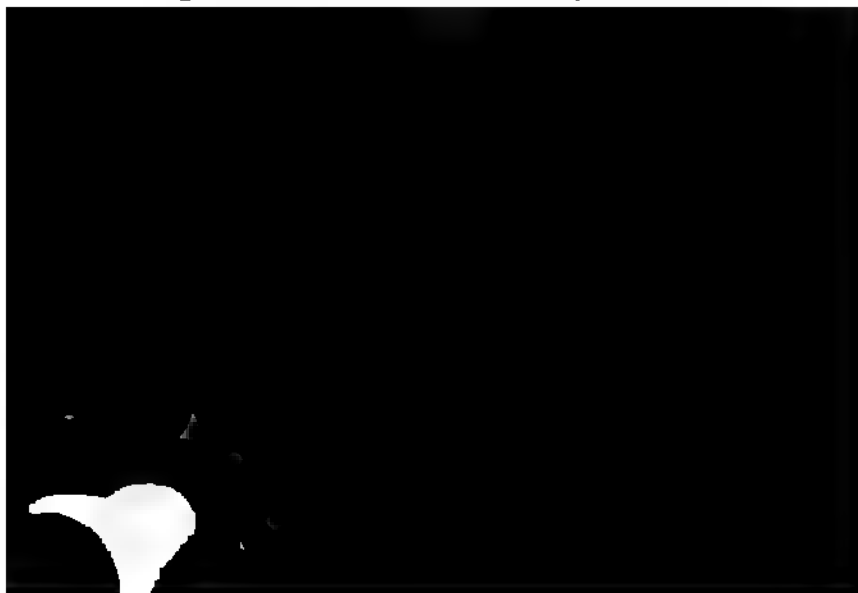
‘ Their head in swimming is always above
‘ water, more so than that of a dog. They
‘ sleep on rocks surrounded by the sea, or on
‘ the less accessible parts of our cliffs, left dry
‘ by the ebb of the tide, and if disturbed by
‘ any thing, take care to tumble over the
‘ rocks into the sea. They are extremely
‘ watchful, and never sleep long without mov-
‘ ing; seldom longer than a minute; then raise
‘ their heads, and if they hear or see nothing
‘ more than ordinary, lie down again, and so
‘ on, raising their heads a little, and reclining
‘ them alternately, in about a minute’s time.
‘ Nature seems to have given them this pre-

308 HORSE-SHOE BAT. Class I.

They collect under eaves of buildings in vast numbers. The Rev. Doctor *Buckworth* informed me that under those of *Queen's College, Cambridge*, he saw taken, in one night, one hundred and eighty-five; the second night sixty-three; the third, two.

40. *Horse-shoe.* La Chauve-souris a fer a non operculatis, cauda
cheval. *De Buffon*, Tom. dimidia corporis longi-
viii. 131. Tab. xvii. xx. tudine. *Gm. Lin.* 80.
Vespertilio ferrum equinum. Horse-shoe Bat. *Hist. quad.*
V. naso ferro equino simili, li. No. 512. p. 316.
auribus caput aquantibus

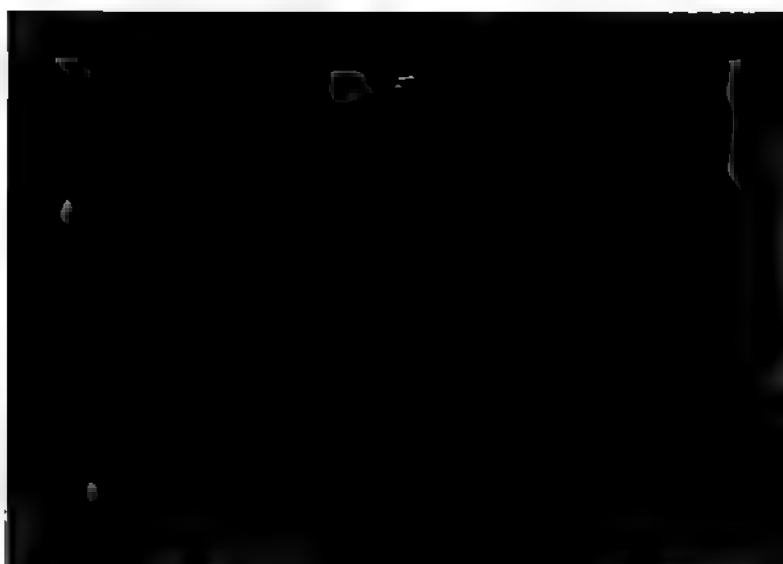
Description THIS species was discovered by Dr. *Latham* at *Dartford, Kent*, who was so obliging as to communicate it to me. They are found in the greatest numbers in the salt-petre houses be-



- Pied Seal. *Br. Zool.* 4th ed. *Phoca bicolor.* *P. nigra* 38. *Pied.*
 i. 139. *Hist. quad.* ii. inauriculata, albo varia,
No. 471. p. 273. *Tab.* 98. naso elongato, pedibus
La Phoque a ventre blanc. posterioribus lunatis.
De Buffon, supp. vi. 310. *Shaw, Gen. Zool.* i. p.
Tab. xlv. 244.

THE nose of this species is taper and elongated; the fore-feet furnished with five toes inclosed in a membrane, but very distinct: the claws long and straight; the hind feet very broad, with five distinct toes, the claws just extending to the margin of the membrane, which expands into the form of a crescent. This I saw at *Chester*; it was taken near that city in *May* 1766. On the first capture, its skin was naked like that of a porpesse, and only the head and a small spot beneath each leg was hairy; before it died the hair began to grow on other parts. The fore part of the head was black, the hind part of the head and the throat white; beneath each fore leg a spot of the same color; hind feet of a dirty white; the rest of the animal of an intense black. I believe they vary in the disposition of the co-

lors; the animal given by *M. de Buffon* had only the belly white. These species, according to that great writer, frequent the coast of the *Adriatic*: the length of that described by *M. de Buffon* was seven feet and a half; that which I saw was much less, and probably a young one.



DIV. IV. WINGED.

GENUS XX. BAT.

TORS of the fore-feet long, extended, connected by a thin membrane continued to the hind-legs, and giving a power of flight.

Vespertilio Noctula. <i>V. caudatus</i> , naso oreque simplici, auriculis ovalibus operculatis: operculo exili. <i>Gm. Lin.</i> 48.	<i>La noctule. De Buffon</i> , 39. <i>Great. Tom.</i> viii. <i>Tab.</i> xviii. p. 128. <i>Hist. quad.</i> ii. No. 513. p. 317. <i>Arct. Zool.</i> i. 215.
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IS a species less common in *Great Britain* than the smaller. It ranges high in the air for food, and retires early in the summer. Is the largest we have; its extent of wing is fifteen inches; its length to the rump two inches eight tenths; that of the tail one inch seven tenths. The nose is slightly bilobated; the ears small and rounded; on the chin is a minute *verruca*. Hair on the body a reddish ashy-color.

of the tail nearly the same; its extent ten and a half.

Mr. *Sowerby* first announced the discovery of this species in *England*: it was found at *Dartford*. Mr. *Montagu* also observed it in *Devonshire*.

- | | |
|--|--|
| 44. Common Vespertilio. Bat, Flitter, or
Flitter Mouse. <i>Rat. syn.</i>
<i>quad.</i> 242. | <i>Le chauve souris. Du Buf.</i>
<i>fon, Tom. viii. 112. Tab.</i>
<i>16.</i> |
| Short-eared English Bat. <i>Vespertilio murina. Gm.</i>
<i>Edw. av. 201. f. 4.</i>
<i>Lin. 48.</i> | <i>V. caudatus naso oraque</i>
<i>simplici. Penn. Succ. 2.</i> |
| <i>Seb. Mus. 1.</i>
The Rear Mouse. <i>Charlton</i>
<i>av. 80.</i> | <i>V. major. Klein quad. 61.</i>
<i>Vespertilio. Plin. Lib. x.</i>
<i>6. 61.</i> |
| <i>Meyer's av. 1. Tab. 2.</i>
<i>Gerner av. 766.</i>
<i>Vespertilio murini coloris</i>
<i>pedibus omnibus penta-</i>
<i>dactylis. Brisson quad. 158.</i> | <i>Br. Zool. 55. Hist. quad.</i>
<i>ii. No. 519. p. 330. Arct.</i>
<i>Zool. 1. p. 215.</i> |

Gerner, Aldrovandus, and some other naturalists, among the birds; they did not consider, that it wanted every character of that order of animals, except the power of flying; if the irregular, uncertain, and jerking motion* of the bat in the air, can merit the name of flight. No birds whatsoever are furnished with teeth, or bring forth their young alive, and suckle them: were other notes wanting, these would be sufficient to determine that the bat is a quadruped.

The species now described, is the most com- *Description*
mon: the usual length of it is about two inches and a half; the extent of the fore-legs nine inches. The members that are usually called the wings, are nothing more than the four interior toes of the fore-feet, produced to a great length, and connected by a thin membrane, which extends also to the hind legs, and from them to the tail; the first toe is quite loose, and serves as a heel, when the bat walks; or as a hook, when it would adhere to any thing. The hind-feet are disengaged from the membrane, and divided into five toes, furnished

* The English synonym of this animal, *Flitter*, or *Flutter mouse*, is very expressive of its action in the air.

with pretty strong claws; the membranes are of a dusky color. The body is covered with short fur, of a mouse-color, tinged with red. The eyes are very small: the ears like those of the mouse.

This species of bat is very common in *England*: it makes its first appearance early in the summer, and begins its flight in the dusk of the evening; it principally frequents the sides of woods, glades, and shady walks, and is also frequently observed to skim along the surface of pieces of water, in quest of gnats and insects; these are not its only food, for it will eat meat of any kind that it happens to find hanging up in a larder.

The bat brings only two young at a time, which it suckles from two teats placed on the breast, like those of the human race. These animals are capable of being brought to some degree of familiarity. The Rev. Mr. *White* of *Selborne* has seen a bat so far tamed as to eat insects out of a person's hand, and while it was feeding would bring its wings round before its mouth, hovering in the manner of birds of prey.

Towards the latter end of summer, the bat

retires into caves, ruined buildings, the roofs of houses, or hollow trees, where it remains the whole winter, in a state of inaction, suspended by the hind-feet, and closely wrapped up in the membranes of the fore-feet.

The voice of the bat is somewhat like that of the mouse, but very low, and weak. *Ovid* takes notice both of that, and the derivation of its *Latin* name,

Lucemque perosa

Nocte volant, seroque tenent a vespere nomen,

———Minimam pro corpore vocem

Emittunt, peraguntque levi stridore querelas.

Met. lib. iv. 10.

Their little bodies found

No words, but murmur'd in a fainting sound,

In towns, not woods, the sooty bats delight,

And never till the dusk begin their flight;

'Till *Vesper* rises with his evening flame;

From whom the *Romans* have derived their name.

Eusden.



CLASS II,

Birds.

AVES INTERNUNCIAE JOVIS.

CXXVI

PINTADO.
PEACOCK.
PHEASANT.

XV. GROUSE.

XVI. BUSTARD.

SECT. IV. COLUMBINE.

XVII. PIGEON.

SECT. V. PASSERINE.

XVIII. STARL.

XIX. THRUSH.

XX. CHATTERER.

XXI. GROSBARK.

XXII. BUNTING.

XXIII. FINCH.

XXIV. FLY-CATCHER.

XXV. LARK.

XXVI. WAGTAIL.

XXVII. WARBLERS.

XXVIII. TITMOUSE.

XXIX. SWALLOW.

GENUS

- V. SNIDE.
- VI. SANDPIPER.
- VII. PLOVER.
- VIII. COURSER.
- IX. PRATINCOLE.
- X. OYSTER-CATCHER.
- XI. RAIL.
- XII. GALLINULE.

SECT. II. PIN FOOTED.

- XIII. PHALAROPE.
- XIV. COOT.
- XV. GREBE.

SECT. III. WEB FOOTED.

- XVI. AVOSET.
- XVII. AUK.
- XVIII. GUILLEMOT.
- XIX. DIVER.
- XX. TERN.
- XXI. GULL.
- XXII. PETREL.
- XXIII. MERGANSER.
- XXIV. DUCK.
- XXV. CORVORANT.

EXPLANATION OF SOME TECHNICAL TERMS IN ORNITHOLOGY USED IN THIS WORK, AND BY LINNÆUS.

<i>Rostrum uncinatum</i>	HOOKED bill, such as is seen in <i>fig. 16. b.</i>
.... <i>cultratum</i>	Cultrated. When the edges of the bill are very sharp, such as in that of the Crow.
..... <i>subulatum</i>	Awl shaped; a term which <i>Linnaeus</i> uses for a straight and slender bill, <i>fig. 17.</i>
..... <i>unguiculatum</i>	A bill with a nail at the end, as in those of the Goosanders and Ducks.
..... <i>emarginatum</i>	Emarginated, when there is a small notch near the end of the bill; this is conspicuous in that of Thrushes, <i>fig. 5.</i>
<i>Nares lineares</i>	When the nostrils are very narrow, as in Sea-gulls.
..... <i>marginata</i>	With a rim round the nostrils, as in the Stare.
<i>Cere</i>	The naked skin that covers the base of the bill in the Hawk kind, <i>fig. 16. c.</i>
<i>Vibrissa</i>	Stiff hairs at the base of the

Lorum

The space between the bill and the eye generally covered with feathers: but in some birds naked, as in the black and white Grebe, *fig. 17. a.*

Orbita

Orbits. The skin that surrounds the eye, which is generally bare, particularly in the Heron, *fig. 16. c.*

Capistrum

A word used by *Linnaeus* to express the short feathers on the forehead, just above the bill. In Crows these fall forwards over the nostrils, *fig. 16. d.*

Nucha

The hind part of the head, *fig. 16. a.*

Pennæ scapulares

Scapular feathers, that rise from the shoulders, and cover the sides of the back, *fig. 15.*

Alula spuria

Bastard wing, a small joint rising at the end of the middle part of the wing, or the *cubitus*; on which are three or five feathers, *fig. 7.*

Tectrices primæ

Lesser coverts of the wings, the small feathers that lie in several rows on the bones of the wings. The Under coverts are those that lie inside of the wing, *fig. 8.*

..... secundæ

Greater coverts, the feathers that lie immediately over the quill-feathers, and secondary feathers, *fig. 9.*

Remiges primores

Greater quill-feathers. The largest feathers of the wings, or those that rise from the first bone, *fig. 10.*

cliffs: it lays three, and sometimes four eggs, of which seldom more than two are prolific; Providence denying a large increase to rapacious birds,* because they are noxious to mankind, but graciously bestowing an almost boundless one on such as are of use to us. This kind of eagle sometimes migrates into *Cuernarvonshire*, and there are instances, though rare, of its having been bred in the *Snowdon* hills, from whence some writers give that tract the name of *Creigiau'r eryri*, or the eagle rocks; others that of *Creigiau'r eira*, or the snowy rocks; the latter seems the more natural epithet, it being more reasonable to imagine that those mountains, like *Niphates* in *Armenia*, and *Imauf* in *Tartary*, derived their name from the circumstance of being covered with snow, which is sure to befall them near the half of every year, than from the acciden-

its wings seven feet four inches; the bill is three inches long, and of a deep blue color; the cere is yellow; the irides of a hazel color: the sight and sense of smelling are very acute: *her eyes behold afar off:** the head and neck are clothed with narrow sharp-pointed feathers, of a deep brown color, bordered with tawny; the hind part of the head in particular is of a bright rust color. The whole body, above as well as beneath, is of a dark brown, and the feathers on the back are finely clouded with a deeper shade of the same: the wings, when closed, reach to the end of the tail; the quill feathers are of a chocolate color, the shafts white: the tail is of a deep brown, irregularly barred and blotched with an obscure ash color, and usually white at the roots of the feathers: the legs are yellow, short, and very strong, being three inches in circumference, and are feathered to the very feet: the toes are covered with large scales, and armed with most formidable claws, the middle of which are two inches long.

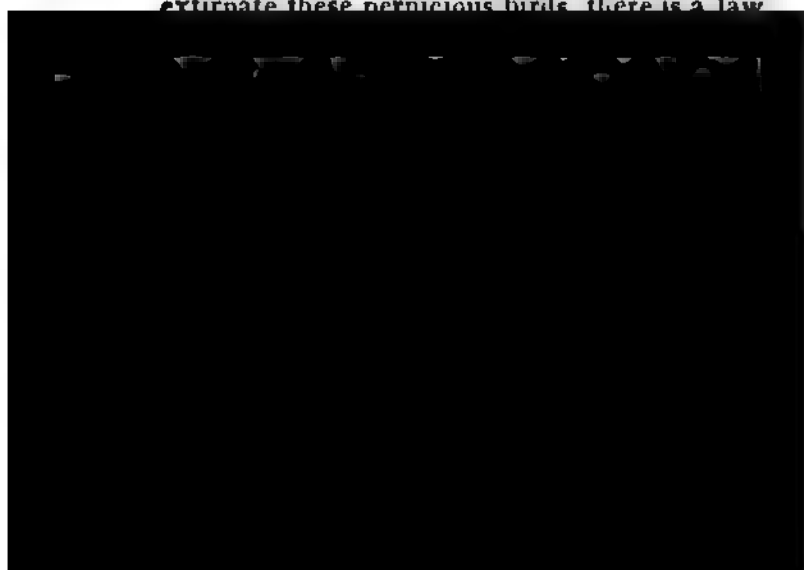
Eagles in general are very destructive to

* *Job xxxix. 9.* Where the natural history of the eagle is finely drawn up.

fawns, lambs, kids, and all kind of game: particularly in the breeding season, when they bring a vast quantity of prey to their young. *Smith*, in his history of *Kerry*, relates that a poor man in that county got a comfortable subsistence for his family, during a summer of famine, out of an eagle's nest, by robbing the eaglets of the food the old ones brought, whose attendance he protracted beyond the natural time, by clipping the wings and retarding the flight of the former. It is very unsafe to leave infants in places where eagles frequent; there being instances in *Scotland** of two being carried off by them, but fortunately,

Illiusum anguibus hæsit onus,

the theft was discovered in time, and the children restored unhurt out of the eagles' nests, to the affrighted parents.† In order to extirpate these pernicious birds, there is a law



Eagles seem to give the preference to the carcasses of dogs or cats. Persons, who make it their business to kill these birds, lay that of one or other by way of bait, and then conceal themselves within gun-shot. They fire the instant the eagle alights, for she that moment looks about before she begins to prey. Yet quick as her sight may be, her sense of hearing seems still more exquisite. If hooded crows or ravens happen to be nearer the car-
 rion and resort to it first, and give a single croak, the eagle, if there is one in any part of the neighbourhood, is certain of instantly re-
 pairing to the spot.

Eagles are remarkable for their longevity, *Longevity*. and for their power of sustaining a long abstinence from food. Mr. *Keyser* relates that an eagle died at *Vienna* after a confinement of 104 years. This pre-eminent length of days probably gave occasion to the saying of the *PSALMIST*, *thy youth is renewed like the eagle's*. One of this species, which was nine years in the possession of *Owen Holland esq.* of *Conwy*, lived thirty-two years with the gentleman who made him a present of it; but what its age was when the latter received it from *Ire-*

land is unknown. The same bird also furnishes a proof of the truth of the other remark, having once, through the neglect of servants, endured hunger for twenty-one days, without any sustenance whatsoever.

2. *Black* *Falco fulvus*. *F. cera flava*, *Raii syn. av. 6.*
Eagle. *pedibus lanatis fusco-fer-* *White tailed eagle. Edw. 1.*
rugineis, dorso fusco, cau- *Falco fulvus. Gm. Lin. 255.*
da fascia alba. Lath. ind. Brisson av. i. 420. L'Aigle
orn. 10. id. Syn. i. 32. id. commun. Hist. d'ois. i.
Sup. i. 10. 86. Pl. Enl. 409.
Golden eagle, with a white *Ring-tail eagle. Br. Zool.*
ring about its tail. Wil. 62. Arct. Zool. i. 226.
orn. 59.

THIS bird is common to the northern parts of *Europe* and *America*; that figured by Mr. *Edwards*, differing only, in some white spots on the breast, from our species. It is frequent

used to abound there. This species generally builds in clefts of rocks near the deer forests, and makes great havock not only among them, but also the white hares and Ptarmigans.

It is equal in size to the preceding: the bill *Description.* is of a blackish horn colour; the cere yellow; the whole body is of a deep brown, slightly tinged with rust color; but what makes a long description of this kind unnecessary, is the remarkable band of white on the upper part of the tail; the end only being of a deep brown; which character it maintains through every stage of life, and in all countries where it is found. The legs are feathered to the feet; the toes yellow, the claws black. Mr. Willughby gives the following very curious account of the nest of this species, p. 21.

‘ In the year of our Lord 1668, in the wood-
‘ lands near the river *Derwent*, in the *Peak* of
‘ *Derbyshire*, was found an eagle’s nest made
‘ of great sticks, resting one end on the edge
‘ of a rock, the other on two birch trees; upon
‘ which was a layer of rushes, and over them a
‘ layer of heath, and upon the heath rushes
‘ again; upon which lay one young one, and
‘ an addle egg; and by them a lamb, a hare,

‘and three heath poults. The nest was about
‘two yards square, and had no hollow in it.
‘The young eagle was black as a hobby, of
‘the shape of a goshawk, of almost the weight
‘of a goose, rough footed, or feathered down
‘to the foot: having a white ring about the
‘tail.’

Mr. Willughby imagines, his first *pygargus*,
or white tailed eagle, p 61. to be but a variety
of this, having the same characteristic mark,
and differing only in the pale color of the
head.

The ancients believed, that the pebble com-
monly called the *ætiles*,* or eagle stone, was
formed in the eagle's nest; and that the eggs
could not be hatched without its assistance.
Many absurd stories have been raised about
this fossil, which (as it bears but an imaginary
relation to the eagle) must be omitted in a zo-

- Falco Ossifragus.** *F. ceratipes* pedibusque semilatis, corpore ferrugineo, rectricibus latere interiore albis. *Lath. ind. orn.* 12. *id. Syn.* i. 30. *id. Sup.* i. 9.
- Bein-brecher, Ossifraga,
Meer-adlet, Fisch-arn,
Halizetos. *Gerner av.* 201.
203.
- Halizetos. *Turneri.*
- Angusta barbata, Ossifraga. *Aldr. av.* i. 118.
- Halizetos. *Plinii lib.* 10. c. 3.
Sib. hist. Scot. 14.
- Sea eagle, or osprey. *Wil.* 3. *Sea Eagle. orn.* 59.
- Raii syn. av.* 7.
- Sea eagle. *Dale's Harwich,* 396.
- Martin's hist. West. isles,* 70.
- Le grand aigle de mer-
Brisson av. i. 437.
- Falco Ossifragus.** *Gm. Lin.* 255.
- Gaase orn. *Brunnich,* 13.
- L'Orfraie. *Hist. d'ois.* i. 112. *Pl. Enl.* 112. 415.
- Sea eagle. *Br. Zool.* 63.
Arct. Zool. i. 224.

THIS species is found in *Ireland*, and several parts of *Great Britain*; the specimen we took our description from, was shot in the county of *Galway*: *Mr. Willughby* tells us there was an acry of them in *Whinfield-park, Westmoreland*; and the eagle soaring in the air, with a cat in its talons, which *Barlow* drew from the very fact which he saw in *Scotland*,* is of this kind.

* *Mr. Walpole's catalogue of engravers, p. 49.*

The cat's resistance brought both animals to the ground, when *Barlow* took them up; and afterwards caused the event to be engraved in the thirty-sixth plate of his collection of prints. *Turner* says, that in his days, it was too well known in *England*, for it made horrible destruction among the fish; he adds, the fishermen were fond of anointing their baits with the fat of this bird, imagining that it had a peculiar alluring quality: they were superstitious enough to believe that whenever the sea eagle hovered over a piece of water, the fish, (as if charmed) would rise to the surface with their bellies upwards, and in that manner present themselves to him. No writer since *Clusius* has described the sea eagle: though no uncommon species, it seems at present to be but little known, being generally confounded with the golden eagle, to which it bears some resemblance.

Description The color of the head, neck and body, are the same with the latter, but much lighter, the tawny part in this predominating: in size it is far superior, the extent of wings in some being nine or ten feet. The bill is larger, more hooked, and more arched; underneath

grow several short but strong hairs or bristles, forming a sort of beard. This gave occasion to some writers to suppose it to be the *aquila barbata* or bearded eagle of *Pliny*. The interior sides, and the tips of the feathers of the tail, are of a deep brown; the exterior sides of some are ferruginous, in others blotched with white. The legs are yellow, strong and thick; and feathered but little below the knees, which is an invariable specific difference between this and our first species. This nakedness of the legs is besides no small convenience to a bird who preys among the waters. The claws are of a deep and shining black, exceedingly large and strong, and hooked into a perfect semicircle; those of the hind and first toe are an inch and a half long.

All writers agree, that this eagle feeds principally upon fish, which it takes as they are swimming near the surface,* by darting itself down on them; not by diving or swimming,

* *Martin*, speaking of what he calls the great eagles in the western isles, says, that they fasten their talons in the back of the fish, commonly of salmon, which are often above water, or on the surface. Those of *Greenland* will even take a young seal out of the water.

as several authors have invented, who furnish it for that purpose with one webbed foot to swim with, and another divided foot to take its prey with. *Pliny*, with his usual elegance, describes the manner of its fishing. *Superest haliaetos, clarissima oculorum acie, librans ex alto sesse, visoque in mari pisce, præceps in eum ruens, et discussis pectore aquis rapiens.*

It also preys on water fowl. The same writer prettily describes the chase, an amusement the inhabitants near the large lakes formed by the *Shannon* frequently enjoy.

It is strange that authors should give the name of *Nisus* to the sparrow hawk, when *Ovid* expressly mentions this as the bird to which the father of *Scylla* was transformed.

Quam pater ut vidit (nam jam pendebat in auras
Et modo factus erat fulvus HALIAETOS alis)



- Falco Albicella.** F. cera *Pl. Enl.* 411. 4. *Cinere*
 pedibusque flavis, rectrici- *Pygargus binnularius*, an
 bus albis, intermediis api- *Erne. Sib. Scot.*
 ce nigris. *Lath. ind. orn.* *Braunfahle Adler. Frisch*
9. id. Syn. i. 33. id. Sup. i. 70.
 i. 11. *Gamsen geyer. Kram. 326.*
Pygargus, or white tailed *Postoina. Scopoli. No. 2.*
 eagle. *Wil. orn. 61. Raii* *Falco Albicilla. Gm. Lin.*
syn. av. 7. 253.
Le grand Pygargue. *Bris.* *Cinereous eagle. Arct. Zo-*
son i. 427. Hist. d'oïis. i. *ol. i. 249.*

IS inferior in size to the golden eagle: the *Description.*
 beak, cere and irides are of a very pale yellow; the space between that and the eyes bare, and of a bluish color. The head and neck are of a pale ash-color; the body and wings cinereous clouded with brown, the quill feathers very dark; the tail white; the legs feathered but little below the knees, and of a very light yellow. The male is of a darker color than the female.

The bill of this is rather straiter than is usual in the eagle, which seems to have induced *Linnaeus* to place it among the vultures; but

it can have no claim to be ranked with that genus, for the *pygargus* is wholly feathered; whereas, the characteristic mark of the vulture is, that the head and neck are either quite bare, or only covered with down.

Inhabits Scotland, and the Orkneys, and feeds on fish, as well as on land animals.

FALCONRY.

Falconry was the principal amusement of our ancestors: a person of rank scarcely stirred out without his hawk on his hand; which, in old paintings, is the criterion of nobility. *Harold*, afterwards king of *England*, when he went on a most important embassy into *Normandy*, is painted embarking with a bird on his fist,



*their hawk fair, and leave study and learning to the children of mean people.** The former were the accomplishments of the times; *Spenser* makes his gallant Sir *Tristram* boast,

Ne is there hauke which mantleth her on pearch,
Whether high towring, or accoasting low,
But I the measure of her flight doe search,
And all her pray, and all her diet know.†

In short, this diversion was, among the old *English*, the pride of the rich, and the privilege of the poor, no rank of men seems to have been excluded the amusement: we learn from the *book of St. Alban's*,‡ that every degree had its peculiar hawk, from the *emperor* down to the *holy water clerk*. Vast was the expence that sometimes attended this sport; in the reign of *James I.* Sir *Thomas Monson*|| is said to have given a thousand pounds for a cast of hawks: we are not then to wonder at the rigor of the laws that tended to preserve a pleasure that was carried to such an extravagant pitch. In

* *Biog. Brit.* article *Carlton*.

† *Book VI. Canto 2.*

‡ A treatise on hunting, hawking and heraldry, printed at *St. Alban's* by *Carlton*, and attributed to *Dame Julian Barnes*.

|| Sir *Ant. Weldon's* court of *K. James*. 105.

the 34th of *Edward III.* it was made felony to steal a hawk ; to take its eggs, even in a person's own ground, was punishable with imprisonment for a year and a day, besides a fine at the king's pleasure : in queen *Elizabeth's* reign the imprisonment was reduced to three months ; but the offender was to find security for his good behaviour for seven years, or lie in prison till he did. Such was the enviable state of the times of *old England* : during the whole day our gentry were given to the fowls of the air, and the beasts of the field ; in the evening they celebrated their exploits with the most abandoned and brutish sottishness ; at the same time the inferior rank of people, by the most unjust and arbitrary laws, was liable to capital punishment, to fines, and loss of liberty, for destroying the most noxious of the feathered



Our ancestors made use of several kinds of native hawks; though that penetrating and faithful naturalist Mr. Ray, has left us only the bare name of a falcon in his list of the *English* birds, without mentioning the species. The falcons or hawks that were in use in these kingdoms, are now found to breed in *Wales*, and in *North Britain*, and its isles. The peregrine falcon inhabits the rocks of *Caernarvonshire*, *Holyhead* mountain, and *Priestholme* island in *Anglesey*. The same species, with the gyrfalcon, the gentil, and the goshawk, are found in *Scotland*, and the lanner in *Ireland*.

We may here take notice that the *Norwegian* breed were, in old times, in high esteem with our countrymen: they were thought bribes worthy a king. *Geoffry Fitzpierre* gave two *Norway* hawks to king *John* to obtain for his friend the liberty of exporting 100 weight of cheese: and *Nicholas* the *Dane* was to give the king a hawk every time he came into *England*, that he might have free liberty to traffick throughout the king's dominions.* They were

* *Madox antiq. exchequer.* i. 469, 470.

also made the tenures by which some of our nobility held their estates from the crown. Thus Sir *John Stanley* had a grant of the *Iste of Man* from *Henry IV.* to be held of the king, his heirs and successors, by homage and the service of two falcons, payable on the day of his or their coronation :† and *Philippe de Hasting* held his manor of *Combertoun*, in *Cambridgeshire*, by the service of keeping the king's falcons.‡

* *Blunt's ancient tenures.* 20.

† *Madox.* i. 652.

- Falco Haliaetus.** *F. cera pedibusque cæruleis, corpore supra fusco, subtus albo, capite albido. Lath. ind. orn. 17. id. Syn. i. 45. id. Sup. i. 13.*
- Une Orfraye.** *Belon. av. 96.*
- Fisch-adler, Masswy, Aquila anataria, Clanga, Planga, Percnos, Morphnos.** *Gesner. av. 196.*
- Haliaetus, seu aquila marina.** *Gesner av. 804.*
- Balbushardus.** *Turneri.*
- Anguista plumbea, Aquilastro, Haliaetus, seu Morphnos.** *Aldr. av. i. 105. 114.*
- Haliaetus.** *Cuii opusc. 85.*
- Bald Buzzard.** *Wil. orn. 69. 5. Osprey.*
- Bald Buzzard, or sea eagle.** *Raii syn. av. 16.*
- Fishing hawk.** *Catesby's Carol. i. Tab. 2.*
- Falco cyanopus.** *Klein Stem. Tab. 8.*
- Falco Haliaetus.** *Gm. Lin. 263.*
- Blafot, Fisk-orn.** *Faun. Suec. sp. 63.*
- Aigle de mer.** *Brisson av. i. 440. Tab. 34. Hist. d'ois. i. 103. Pl. Enl. 414.*
- Fisk-oern.** *Brunnich, p. 5.*
- The Osprey.** *Br. Zool. 63. Tab. A. i. Arct. Zool. i. 231.*

MR. *Ray* places this bird among the hawks, instead of the eagles, on a supposition that *Mr. Willughby* had exceeded in his account of its weight; but as we had an opportunity of confirming the words of the latter, from one of this species just taken, we here restore it to the aquiline rank, under the name of the Osprey; which was the name it was known by in *England* above one hundred and sixty years

ago, as appears by Dr. *Kay*, or *Caius's* description of it, who also calls it an eagle.

- Nest.* This bird haunts rivers, lakes, and the sea-shores. Mr. *Oedman* flings new light on its history; he says, that it breeds on the tops of the highest trees, and makes its nest with wonderful art of the twigs of the fir-tree, and lines the bottom with *polypodies*. It lays three eggs of the size of those of a hen, marbled with rust color. It brings fish and serpents to feed its young, and even eels of a large size,
- Food.* which renders its nest very fetid. It feeds chiefly on fish,* taking them in the same manner as the sea eagle does, not by swimming but by precipitating itself on them; its feet being formed like those of other birds of prey, for the left is not at all palmated, as some, copying the errors of antient writers, assert it



twenty-three inches; the breadth five feet four inches; the wing when closed reached beyond the end of the tail; that, as in all the hawk kind, consisted of twelve feathers; the two middle feathers were dusky, the others barred alternately on their inner webs with brown and white; on the joint of the wing next the body was a spot of white: the quill feathers of the wings were black; the secondary feathers and the coverts dusky, the former having their interior webs varied with brown and white; the inner coverts were white spotted with brown. The head small and flat, the crown white marked with oblong dusky spots. The cheeks, chin, belly and breast white, the last spotted with a dull yellow: from the corner of each eye a bar of brown extended along the sides of the neck pointing towards the wing. The legs very short, thick and strong, their length being only two inches and a quarter; their circumference two inches; their color a pale blue: the outward toe turns easily backwards, and what merits attention, the claw belonging to it is larger than that of the inner toe, in which it differs from all other birds of prey, but seems peculiarly necessary to this kind, for better se-

curing its slippery prey: the roughness of the soles of the feet contributes to the same end. The difference in weight, and other trifling particulars, makes us imagine that the bird Mr. *Willughby* saw was a male, as the females of all the hawk kind are larger, stronger, and fiercer than the males; the defence of their young, and the providing them with food, resting chiefly on them.

6. *Gyrfal.* *Falco islandicus.* F. albus White Falcon. *Wil. orn.* 80.
con. maculis fuscis variis, rec- F. islandus albus. *Brunnich*
 tricibus albis, lateralibus 7, 8.
 extus fusco maculatis. *Le Gerfault. Brisson av.* i.
Lath. ind. orn. 32. *id. Syn.* 370. *Hist. d'ois.* i. 239.
 i. 83, 84. *id. Sup.* i. 21. *Pl. Enl.* 446.
Le Gerfault. Belon av. 94. *Sib. Scot.* 14.
Gyrfalco. Aldr. av. i. 243. *Charlton ex.* 317.
Jer-falcon. Wil. orn. 78. White Gyr-falcon. *Arct.*
Gyrfalco. Raii sup. av. 13. *Zool.* i. 232.

narrow lines, thinly scattered and pointing downwards; the wings with large heart-shaped spots; the middle feathers of the tail with a few bars: the feathers on the thighs are very long, and of a pure white; the legs of a pale blue, and feathered a little below the knees. This kind is sometimes found quite white: it was in high esteem when falconry was in vogue, and used for the noblest game, such as cranes and herons.

This is the *Gyrfalco* of all the ornithologists except *Linnaeus*, whose bird we are totally unacquainted with: though he gives several of their synonyms, his description differs entirely from each of them. It inhabits the north of *Scotland*; our specimen was shot near *Aberdeen*.

- 1. Peregrine.* *Falco peregrinus.* *F. cera* *Falco peregrinus niger.*
pedibusque luteis, corpore Aldr. av. i. 239.
nigricante transversim Blue backed falcon. Charl.
striato, supra cærulescen- Ex. 73.
te, subtus albido, rectri- Sparviere pellegrino femmi-
cibus fasciatis apicibus al- na. Lorenzi av. Tab. 24.
bidis. Lath. ind. orn. Le Faucon pelerin. Bris-
33. id. Syn. i. 73. id. son av. i. 341. Hist. d'oïis,
Sup. i. 18. Gm. Lin. i. 249.
272. Peregrine Falcon. Br. Zool.
Belon av. 116. Tab. A. 5. Arct. Zool. i.*
236.

Description **I**N size equal to the moor-buzzard. The bill is strong, short, and very much hooked, armed near the end of the upper mandible with a very sharp process; blue at the base, black at the point: the irides dusky.

The feathers on the forehead are whitish: the crown of the head black mixed with blue:

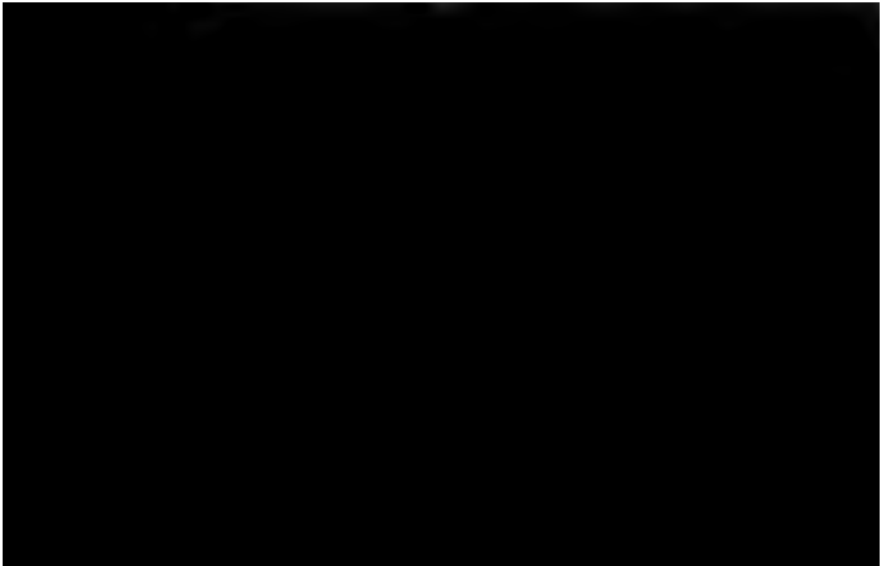


part of the breast white slightly tinged with yellow, the last marked with a few small dusky lines pointing downwards. The rest of the breast, the belly, thighs and vent feathers, white inclining to grey, and crossed with dusky strokes pointed in the middle. The tail consists of feathers of equal length, finely and frequently barred with blue and black. The legs are short and yellow: the toes very long.

This species seems to vary: we have seen one that was shot in *Hampshire*, just as it had struck down a Rook and was tearing it to pieces. The whole under side of the body was of a deep dirty yellow, but the black bars were the same as in that above described. The weight of this was two pounds eight ounces; the extent thirty eight inches. Another which was shot by the Dean of *St. Asaph*, in *October 1794*, was of the first kind. Its extent was three feet one inch, its length eighteen inches and a half: the weight only twenty four ounces and a half. It was most excessively fat. As it was inferior in weight to the other, it probably was a male bird.

This species breeds on the rocks of *Llandudno* in *Cacernarvonshire*. That promontory

has been long famed for producing a generous kind, as appears by a letter extant in *Gloddaeth* library, from the lord treasurer *Burleigh* to an ancestor of Sir *Roger Mostyn*, in which his lordship thanks him for a present of a fine cast of hawks taken on those rocks, which belong to the family. They are also very common in the north of *Scotland*, and are sometimes trained for falconry by some few gentlemen who still take delight in this amusement in that part of *Great Britain*. Their flight is amazingly rapid: one that was reclaimed by a gentleman in the shire of *Angus*, a county on the east side of *Scotland*, eloped from his master with two heavy bells to each foot, on the twenty-fourth of *September 1772*, and was killed in the morning of the twenty-sixth, near *Mostyn, Flintshire*.



Falco griseus. F. cera pal-	rectricibusque lateralibus 8. <i>Grey.</i>
pebris pedibusque luteis,	albo maculatis. <i>Lath.ind.</i>
corpore supra griseo, ab-	<i>orn.</i> 37. <i>id.</i> <i>Syn.</i> i. 82.
domine albo maculis ob-	<i>Falco griseus.</i> <i>Gm.Lin.</i> 275.
longis nigris, cauda cunei-	<i>Grey Falcon.</i> <i>Br. Zool.</i> 65.
formi longa, remigibus	<i>ib. octavo.</i> 137.

THIS kind was shot near *Halifax* in 1762, *Description.* and the following account transmitted to us by *Mr. Bolton*, of *Worly-clough*. This bird was about the size of a raven: the bill was strong, short, much hooked, and of a bluish color; the cere, and edges of the eye-lids yellow; the irides red; the head was small, flatted at the top; the fore part of a deep brown; the hind part white. The sides of the head and throat were creme colored; the belly white, marked with oblong black spots; the hind part of the neck, and the back were of a deep grey. The wings were very long, and when closed reached beyond the tail; the first of the quill feathers were black, with a white tip; the others were of a bluish grey, and their inner webs irregularly spotted with white: the tail was long, and wedge shaped; the two middle

Feathers being the longest, were plain, (the color not mentioned) the rest spotted. The legs were long, naked, and yellow.

9. *Gentil.* *Falco gentilis*. F. cera pedibusque flavis, corpore cinereo maculis fuscis, cauda fasciis quatuor nigricantibus. *Lath. ind. orn.* *Rat. syn. av. Arct. Zool.* i. 237.
29. id. Syn. i. 61. id. Sup. *Falk. Faun. Succ. sp.* 58.
17. Gm. Lin. 270: *Kram. Austr.* 328.
Gentil Falcon. Wil. orn. 80. *Falco gentilis. Brun. No.* 6. *Scopoli, No.* 3.
L'Autour. Hist. d'ois. i. 230.

Description **T**HIS species is larger than the goshawk, and of an elegant make. Cere, and legs yellow, irides light yellow; pupil large and of a full black: head light rust color, with oblong black spots. The whole under side from chin to tail white, tinged with yellow; each feather marked

first edged above and below with a line of dull white; the very tips of all the tail feathers white.

The young birds vary in having on their breasts transverse bars instead of cordated spots, as in the specimen, *Plate 24*.

This species inhabits the north of *Scotland*, and was in high esteem as a bold and spirited bird in the days of falconry. It makes its nest in rocks.

- | | |
|---|--|
| Falco Lanarius. <i>F. cera lutea, pedibus rostroque cæruleis, corpore subtus maculis nigris longitudinalibus.</i> <i>Luth. ind. orn.</i> 38. | The Lanner. <i>Wil. orn.</i> 82. 10. <i>Lanner, Arct. Zool.</i> i. 260. |
| <i>id. Syn.</i> i. 86. <i>id. Sup.</i> i. 21. | <i>Lanarius. Raii syn.</i> av. 15. |
| | Falco Lanarius. <i>Gm. Lin.</i> 276. |
| | <i>Faun. Suec. sp.</i> 62. |
| | <i>Le Lanier. Hist. d'oïs.</i> i. 243. |

THIS species breeds in *Ireland*: the bird our description is taken from, was caught in a decoy in *Lincolnshire*, pursuing some wild ducks under the nets, and communicated to us by *Taylor White Esq.* under the name of the *Lanner*.

It was less than the buzzard. The cere was *Description,*

of a pale greenish blue; the crown of the head of a brown and a yellow clay color: above each eye, to the hind part of the head, passed a broad white line, and beneath each, a black mark pointing downwards: the throat white; the breast tinged with dull yellow, and marked with brown spots pointing downwards; the thighs and vent spotted in the same manner; the back and coverts of the wings deep brown, edged with a paler brown: the quill feathers dusky; the inner webs marked with oval rust colored spots: the tale was spotted like the wings. The legs short and strong, and of a bluish cast, which Mr. *Willughby* says, is the character of that bird. We are here to observe, that much caution is to be used in describing the hawk kind, no birds being so liable to change their colors the two or three



kinds in different periods of their lives, by the writers on falconry, which ornithologists have adopted and described as distinct kinds: even Mr. Ray has been obliged to copy them. The falcon, the falcon gentil, and the haggard, are made distinct species, whereas they form only one: this is explained by a *French* author, who wrote in the beginning of the seventeenth century, and effectually clears up this point; speaking of the falcon, he tells us, “ S’il est
“ prins en *Juin Juillet et Aoust*, vous le nomme-
“ rez *Gentil*: si en *Septembre, Octobre, Novem-*
“ *bre* ou *Decembre*, vous le nommerez *Pellerin*
“ ou *Passager*: s’il est prins en *Janvier, Feburier*
“ et *Mars*, il sera nommé *Antenere*: et apres
“ estre muë une fois et avoir changé son cer-
“ ceau, non auparavant, vous le direz *Hagar*,
“ mot *Hebrieu*, qui signifie *estranger*.”*

* *La fauconnerie de Charles d’Arcussia seigneur d’Esparron*, p. 14. 5me edit. Paris 1607.

11. *Gos- hawk.* *Falco palumbarius*. F. cere nigra, margine pedibusque flavis, corpore fusco, rectricibus fasciis pallidis, supercilliis albis. *Lath. ind. orn.* 29. *id. Syn.* i. 58. *id. Sup.* 16. *Gm. Lin.* 269. Autour. *Belon* av. 112. *Aldr.* av. i. 181. *Sib. Scot.* 15.
- Goshawk, accipiter palumbarius. *Wil.* av. 85. *Arct. Zool.* i. 238. *Raii syn.* av. 18. L'Atour, Astur. *Brisson* av. i. 317. *Hist. d'ois.* i. 230. *Pl. Enl.* 418. 461. Grosser gefeilter Falck. *Frisch.* i. 82. Astorc. *Linna.* 87.

Description. **THE** goshawk is larger than the common buzzard, but of a longer and more elegant form. The bill is blue towards the base, black to the tip: the cere a yellowish green; over each eye is a white line; and on the side of the neck is a band of broken white: the head, hind part of the neck, back and wings are of



This species and the sparrow hawk, are distinguished by Mr. *Willughby* by the name of short winged hawks, because their wings, when closed, fall short of the end of the tail.

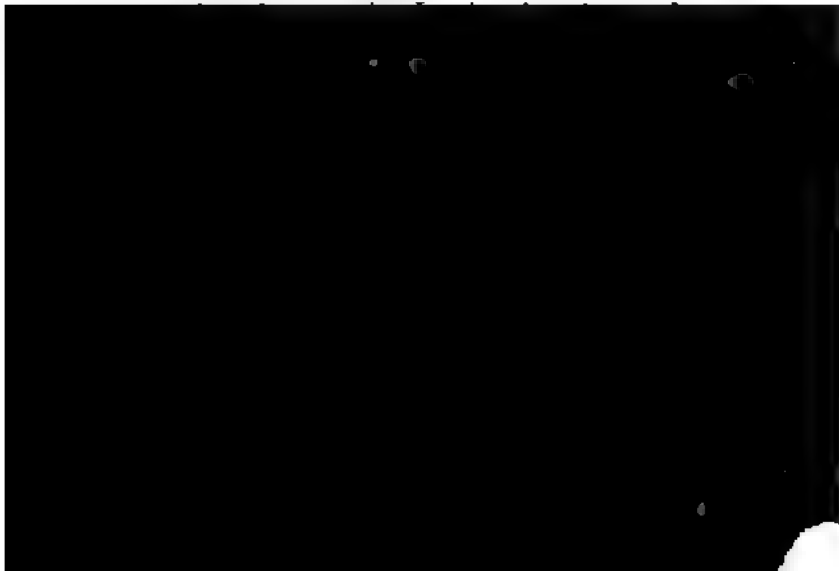
The goshawk was in high esteem among falconers, and flown at cranes, geese, pheasants and partridges. It breeds in Scotland, and builds its nest in trees; is very destructive to game, and dashes through the woods after its quarry with vast impetuosity; but if it cannot catch the object of its pursuit, almost immediately, desists, and perches on a bough till some new game presents itself.

<i>Falco versicolor. F. cera flava, corpore supra albo et rufescente-fusco vario, uropygio subtus albicante, pectore ferrugineo maculato, remigibus rectricibusque fuscis saturatiore</i>	<i>fasciatis. Lath. ind. orn. 12. Spotted. 33. id. Syn. i. 74. Gm. Lin. 272.</i>
	Spotted Falcon. <i>Br. Zool. p. 4. Tab. 11.</i>
	Common Falcon. <i>var. 10. Shaw. Gen. Zool. vii. 127.</i>

TWO of these birds have been shot near *Longnor, Skropshire.*

Size of a buzzard: bill black; cere and legs yellow: irides pale yellow: crown, and hind *Description.*

externally with sticks, lined with several odd materials, such as rags, bits of flannel, rope, and paper. It lays two, or at most three eggs, which, like those of other birds of prey, are much rounded, and blunt at the smaller end; they are white, spotted with a dirty yellow. Its motion in the air distinguishes it from all other birds, being so smooth and even, as to be scarcely perceptible; sometimes it will remain quite motionless for a considerable time; at others glides through the sky, without the least apparent action of its wings: from thence is derived the old name of Glead, or Glede, from the *Saxon* Glida. Lord *Bacon* observes, that when kites fly high, it portends fair and dry weather. Some have supposed them to be birds of passage; but in *England* they certainly continue the whole year. *Clusius* relates* that



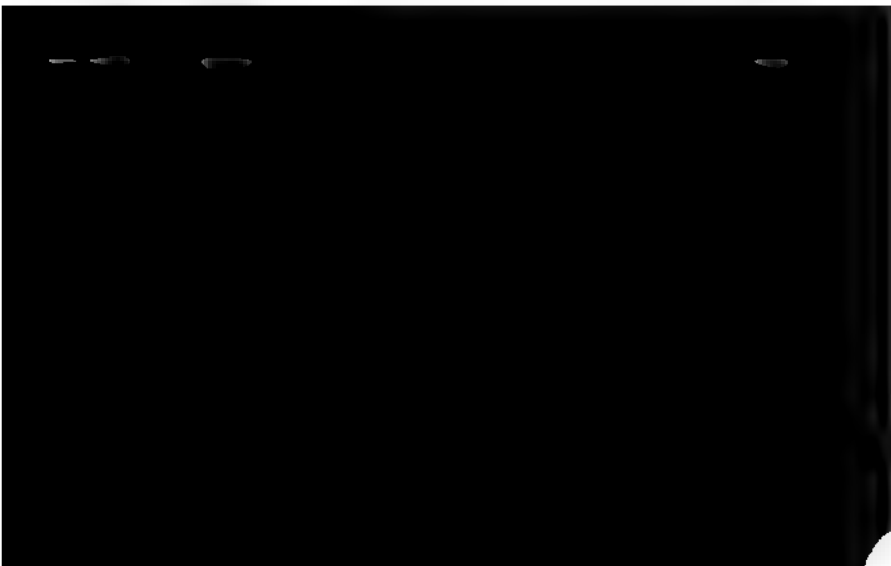
guish it from all other *British* birds of prey, being forked. *Pliny* thinks that the invention of the rudder arose from the observation men made of the various motions of that part, when the kite was steering through the air.* Certain it is that the most useful arts were originally copied from animals; however we may now have improved upon them. Still in those nations which are in a state of nature, (such as the *Samoieds* and *Esquimaux*) their dwellings are inferior to those of the beavers, which those scarcely human beings but poorly copy.

The weight of this species is forty-four *Description,* ounces: the length twenty-seven inches: the breadth five feet one inch. The bill is two inches long, and very much hooked at the end: the cere yellow: the irides of a straw-color. The head and chin are of a light grey, in some, white, marked with oblong streaks of black: the neck and breast are of a tawny red, but the middle of the feathers black. On the belly and thighs, the spots are fewer, and under the tail they almost vanish. The upper part of the

* *Iidem videntur artem gubernandi docuisse caudæ flexibus. Lib. x. c. 10.*

back is brown, the middle covered with very soft white down. The five first quill feathers are black; the inner webs of the others dusky barred with black, and the lower edges white. The coverts of the wings are varied with tawny black and white: the tail is forked, and of a tawny red: the outmost feather on each side of a darker hue than the rest; and marked with a few obscure dusky spots: the thighs are covered with very long feathers: the legs are yellow and strong.

These birds differ in their colors. We have seen a beautiful variety shot in *Lincolnshire* that was entirely of a tawny color.



- Falco Buteo.** *F. cera pedibusque luteis, corpore fusco, abdomine pallido maculis fuscis, cauda fusco fasciata.* *Lath. ind. orn.* 23. *id. Syn. i.* 48. *id. Sup. i.* 14.
- Le Buse, ou Busard.** *Belon av.* 100.
- Buteo.** *Gesner. av.* 46.
- Busharda.** *Turneri.*
- Buteo, seu Triorches.** *Ald. av. i.* 190.
- Triorches, Buteo.** *Plin. lib. x. c.* 7.
- Rail syn. av.* 16.
- Common Buzzard, or Putock.** *Wil. orn.* 70.
- Wald Geyer.** *Kram.* 329.
- Falco Buteo.** *Gm. Lin.* 265.
- Quidsogel.** *Faun. Succ. sp.* 60.
- La Buse.** *Brisson av. I.* 406.
- Hist. d'oiz. I.* 206. *Pl. Enl.* 419.
- Pojana.** *Zinan.* 85. *Scopoli. No.* 4.
- Br. zool. 86. Tab. A. 3. Arct. Zool. i.* 241.
- Oerne Falk.** *Brunnich p. 11.*
15. **Buzzard.**

THIS bird is the commonest of the hawk kind we have in *England*. It breeds in large woods, and usually builds on an old crow's nest, which it enlarges and lines with wool, and other soft materials; it lays two or three eggs, which are sometimes wholly white; sometimes spotted with yellow. The cock buzzard will hatch and bring up the young, if the hen is killed.* The young consort with

* *Ray's Letters.* 352.

the old ones for some little time after they quit the nest; which is not usual with other birds of prey, who always drive away their brood as soon as they can fly. This species is very sluggish and inactive; and is much less in motion than other hawks, remaining perched on the same bough for the greatest part of the day, and is found at most times near the same place. It feeds on birds, rabbits, moles and mice; it will also eat frogs, earth-worms and insects.

Description. This bird is subject to some variety in its colors; we have seen some whose breast and belly were brown, and only marked across the craw with a large white crescent: usually the breast is of a yellowish white, spotted with oblong rust-colored spots, pointing downwards. The chin is ferruginous; the back of the head and neck, and the coverts of the wings are of a deep brown, edged with a pale rust color: the scapular feathers brown, with white towards their roots: the middle of the back is covered only with a thick white down: the ends of the quill feathers are dusky; their lower exterior sides ash-colored; their interior sides blotched with darker and lighter shades of the same.

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The tail is barred with black and ash-color, and sometimes with ferruginous; the bar next the very tip is black, and the broadest of all; the tip itself of a dusky white. The irides are white, tinged with red. The weight of this species is thirty-two ounces: the length *Six*. twenty-two inches; the breadth fifty-two.

- | | |
|--|---|
| Falco apivorus. F. cera nigra, pedibus seminudis flavis, capite cinereo, caudæ fascia cinerea, apice albo. | Frosch-geyerl. <i>Kram.</i> 331. 16. <i>Honey Buzzard.</i> |
| <i>Lath. ind. orn.</i> 25. <i>id.</i> | Falco apivorus. <i>Gm. Lin.</i> 267. |
| <i>Syn. i.</i> 52. <i>id. Sup. i.</i> 14. | Slag-hok. <i>Faun. Suec. sp.</i> 65. |
| Le Goiran, ou Bondrée. | La Bondrée. <i>Brisson av. i.</i> 410. <i>Hist. d'ois. i.</i> 208. |
| <i>Belon av.</i> 101. | <i>Pl. Enl.</i> 420. |
| <i>Ald. av. i.</i> 191. | <i>zinan.</i> 84. |
| Honey-Buzzard. <i>Wil. orn.</i> 72. | <i>Br. Zool.</i> 67. <i>Tab. A.</i> 4. A* 4. <i>Arct. Zool. i.</i> 260. |
| <i>Raii syn. av.</i> 16. | <i>Muse-Hoeg, Muse-Baage, Brunnich, p.</i> 5. |

THE weight of this species is thirty ounces: *Description.* the length twenty-three inches; the breadth fifty-two. The bill and cere are black; the latter much wrinkled; the irides of a fine yellow: the crown of the head ash-colored: the neck, back, scapulars, and covert feathers of

wild ducks,* and other water fowl. It also preys, like the Osprey, upon fish.

Description. Its usual weight is twenty-one ounces: the length twenty-one inches; the breadth four feet three inches. The bill is black; cere yellow; irides of the same color: the whole bird, head excepted, is of a chocolate brown, tinged with rust color: on the head is a large yellowish spot. We have seen some birds of this kind with their head and chin entirely white; others again have a whitish spot on the coverts of the wings; but these are only to be deemed varieties. The uniform color of its plumage, and the great length and slenderness of its legs, distinguish it from all other hawks.

† In some places it is called the *duck hawk*.

- Falco cyaneus.** F. cera al- Blue Hawk. *Edw.* 225. the 18. Hen-
ba, pedibus fulvis, corpo- male. Harrier.
re cœruleo-canesciente, ar- *Male.*
cu superciliari albo gulam
cingente. (*Mas*) *Lath.*
ind. orn. 39. *id. Syn.* i. 88.
id. Sup. i. 22.
Lanarius albus. *Aldr. av.* 459.
i. 197. *Br. Zool.* 68. *Tab. A.* 6.
Rubetarius Turneri. *Gm. Lin.* 276.
Wil. orn. 70. *Le Lanier cendré. Brisson*
Raii syn. av. 17. *av. i. 365. the male. Hist.*
d'ois. i. 212. Pl. Enl.
Grau-weiße Geyer. Frisch,
Brunnich 14.
i. 79, 80.

THE HEN-HARRIER weighs about twelve *Description.*
ounces: the length is seventeen inches; the
breadth three feet three inches. The bill is
black: the cere, irides, and edges of the eye-
lids yellow: the head, neck, back, and coverts
of the wings, are of a bluish grey: the back
of the head white, spotted with a pale brown;
the breast, belly, and thighs, are white; the
former marked with a few small dusky streaks:
the scapular feathers are of a deep grey, in-
clining to dusky: the two middle feathers of
the tail are entirely grey; the others only on
their exterior webs; the interior being white,

marked with dusky bars; the legs yellow, long and slender.

18. *Ringtail*. *Falco cyaneus*. F. cera pe-
Female. dibusque flavis, corpore
 cinereo, abdomine pallido,
 maculis oblongis rufis, o-
 culorum orbita alba. (*Fe-*
mina.) *Lath. ind. orn.* 39.
id. Sup. i. 22.
Subbuteo. *Gesner av.* 48.
Ringtail. *Pygargus accipi-*
ter. *Raii syn. av.* 17.
Wil. orn. 70.
Le faucon a collier. *Brts-*
son av. i. 345.
 Une autre oyseau *St. Mar-*
tin. Btton av. 104.
Rubetarius Turneri.
La Soubuse. Hist. d'oïis. i.
 215. *Pl. Ent.* 443. 480.
Brunnich, No. 14.
Br. Zool. 68. *Tab.* 4. 7.
Arct. Zool. i. 243.

Description **THE RINGTAIL** weighs sixteen ounces: is twenty inches long; and three feet nine inches broad. The cere and irides are yellow: on the hind part of the head, round the ears to the



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broad cinereous bars; the others with three black, and three tawny bars; but the tips of all, white. The breast and belly are of a yellowish brown, with a cast of red, and marked with oblong dusky spots, but they are subject to vary, for we have met with one specimen that had these parts entirely plain. The legs in color and shape resemble those of the preceding.

These birds are extremely destructive to young poultry, and to the feathered game: they fly near the ground, skimming the surface in search of prey. They breed on the ground, and never are observed to settle on trees. *Willughby* says, that the eggs are white, much besmeared with red.

[Ash-colored Falcon. *Mont.* *Falco hyemalis.* *Gm. Lin.* 19. *Ash-colored falcon.*
orn. dict. id. Lin. Tr. ix. 274.
188.

THIS species has been added to the list of *British falcons*, by *Mr. Montagu*. It resembles the hen-harrier in many respects, but differs in the want of the wreath of short feathers round

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the head, and in the greater relative length of wing and tail. A male, killed in *Devonshire* in 1803, weighed nine ounces and three quarters; its length was eighteen inches; its extent three feet eight inches and a half. The bill black, base and cere greenish; irides bright yellow; crown of the head, cheeks, throat, under part of the neck and upper breast, dark ash-color: the upper part of the neck, back and scapulars cinereous brown; greater coverts the same; the eight prime quills a dusky black: secondary quills cinerous brown above, pale beneath, with three remarkable dusky bars across them, nearly parallel, each half an inch in breadth, one only of which is visible on the upper side of the wing, on the under part two of these bars are very conspicuous. The under parts of the body and thighs white, with a broad streak of bright bay down the shaft of each feather: the tail rather cuneiform, the two middle feathers dark brown or dusky, the rest dark ash-color marked on the inner webs with four equidistant bars; the legs orange yellow, rather long and slender; the claws small and black.] ED.

- Falco Tinnunculus.** F. cera
pedibusque flavis, dorso
rufo punctis nigris, pecto-
re striis fuscis, cauda ro-
tundata. *Lath. ind. orn.*
41. *id. Syn.* i. 94. *id. Sup.*
i. 25.
La Cresserelle. *Belon av.*
125.
Gesner av. 54.
Kistrel, Kastrel, or Steingal,
Turneri.
Aldr. av. 188.
The Kestrel, Stannel, Stone-
gall, Windhover. *Wil. orn.*
84.
Ruii syn. av. 16.
La Cresserelle. *Brisson av.*
i. 393. *Hist. d'oies.* i. 280. 20. *Kestrel.*
Pl. Enl. 401. 471.
Windwacht, Rittlweyer,
Wannenweher. *Kram.*
331.
Roethel-Geyer. *Frisch.* i.
84. *fæm.* Maase-Falck.
Frisch. i. 88.
Falco Tinnunculus. *Gm.*
Lin. 278.
Kyrko-Falk. *Faun. Suec.*
sp. 61.
Kirke-Falk. *Brunnich* 4, 5.
Gheppio, Acertello, Gavi-
nello. *Zinan.* 88.
Br. Zool. 68. plate A. *Arct.*
Zool. i. 261.
Postoka, Splintza, Skoltsch.
Scopoli, No. 5.

THE male of this beautiful species weighs *Description*
only six ounces and a half; its length is four-
teen inches: the breadth two feet three inches.
The cere and legs yellow: irides dark. Its co-
lors at once distinguish it from all other hawks:
the crown of the head, and the greater part of
the tail, are of a fine light grey, the lower end
of the latter is marked with a broad black bar:

the inner webs of the three feathers next the two middle barred with black; the tips white: the back and coverts of the wings are of a brick red, elegantly spotted with black; the interior sides of the quill feathers are dusky, deeply indented with white. The whole under side of the bird, of a pale rust color, spotted with black; the thighs and vent only, plain.

Female. The female weighs eleven ounces: the colors of the back and wings are far less bright than those of the male: it differs too in the colors of the head and tail; the former being of a pale reddish brown, streaked with black; the latter of the same color, marked with numerous transverse black bars: the breast is of a dirty yellowish white; and the middle of each feather has an oblong dusky streak, pointing downwards.

The kestrel breeds in the hollows of trees, in



which time it is watching for its prey. It flings up the indigested fur and feathers in form of a round ball. While falconry was in use in *Great Britain*, this kind was trained for catching small birds and young partridges.

A few winter in *Italy*; the greater part migrate in *September*.

- | | |
|---|---|
| Falco Subbuteo. F. cera pedibusque flavis, dorso fusco, nucha alba, abdomine pallido maculis oblongis fuscis, crisso femoribusque rufis. <i>Lath. ind. orn.</i> 47. | Le Hobreau, Dendro. falco. 92. <i>Hobby.</i> |
| <i>id. Syn.</i> i. 103. <i>id. Sup.</i> i. 28. | <i>Briss. av.</i> i. 375. <i>Hist. d'ois.</i> i. 277. <i>Pl. Enl.</i> 131, 432. |
| | <i>Rufi syn. av.</i> 15. |
| | Falco Subbuteo. <i>Gm. Lin.</i> 283. |
| | <i>Faun. Suec. sp.</i> 59. |
| Le Hobreau, <i>Belon av.</i> 118. | Barletta, <i>Lorenzi av.</i> 45. |
| <i>Gesner av.</i> 75. <i>fam.</i> | Stein-Falck, <i>Frisch.</i> i. 86. |
| Hobbia <i>Turneri.</i> | Lærke-Falk. <i>Brunnich</i> 10. |
| <i>Asalon. Ald. av.</i> i. 187. | <i>Br. Zool.</i> 69. plate A. 9. |
| The Hobby. <i>Wil. orn.</i> 83. | <i>Arct. Zool.</i> i. 262. |

THIS bird was also used in the humbler kind of falconry; particularly in what was called daring of larks: the hawk was cast off; the larks aware of their most inveterate enemy, are fixed to the ground through fear, which makes them a ready prey to the fowler, by

drawing a net over them. The hobby is a bird of passage, but breeds in *England*; it migrates in *October*.

Description The male weighs seven ounces: the length is one foot; the breadth two feet three inches. The cere and orbits are yellow: irides hazel: upper mandible furnished with a process: above each eye a white line: the crown of the head and back are of a deep bluish black; the hind part of the head is marked with two pale yellow spots; each cheek with a large black one pointing downwards: the coverts of the wings are of the same color with the back, but slightly edged with rust color: the interior webs of the secondary and quill feathers, are varied with oval transverse reddish spots. The breast white, marked with oblong spots of black: thighs and vent feathers, pale orange: the two middle feathers of the tail are entirely of a deep dove color; the others are barred on their interior sides with rust color, and tipped with a dirty white: legs yellow. The spots on the breast of the female are of a higher color than those of the male: it is greatly superior in size: its legs have a tinge of green, in other respects it resembles the former.

Female,

- Falco Nisus.** *F. cera viridi, pedibus flavis, abdomine griseo undulato, cauda fasciis nigricantibus.* *Lath. ind. orn.* 44. *id. Syn.* i. 99. *id. Sup.* i. 26. *son av.* i. 310. *Hist. d'ois.* 22. *Spar.* i. 225. *Pl. Enl.* 467. row *Hawk.* 412. *Raii syn. av.* 18. *Sperber. Frisch* i. 90, 91. *Kram.* 332.
- L'Espervier.** *Belon av.* 121. *Gesner av.* 51. *Sparhauc Turneri.* *Falco Nisus. Gm. Lin.* 280. *Sparfhoek. Faun. Suec. sp.* 69. *Spurre-hoog. Brunnich p.* 5. *Scopoli. No.* 6. *Br. Zool.* 69. plate A. 10. *A. 11. Arct. zool.* i. 262.
- Accipiter fringillarius,** *sparviero. Aldr. av.* i. 183. *Wil. orn.* 86. *L'Epervier, accipiter. Bris-*

THE difference between the size of the male and female sparrow hawks, is more disproportionate than in most other birds of prey; the former sometimes scarcely weighing five ounces, the latter nine ounces. The length of *Description,* the male is about twelve inches, the breadth twenty-three: the female is fifteen inches long; in breadth twenty-six. These birds, as well as the hawk kind in general, vary greatly in their colors; in some, the back, head, coverts of the wings and tail, are of a deep bluish grey; in others of a deep brown, edged with a rusty red: the quill feathers are dusky,

barred with black on their exterior webs, and spotted with white on the lower part of their inner webs: the tail is of a deep ash color marked with five broad black bars, the tip white: the breast and belly are of a whitish yellow, adorned with transverse waved bars; in some of a deep brown color, in others orange. The cere, irides, and legs yellow. The colors

Female. of the female differ from those of the male: the head is of a deep brown; the back, and coverts of the wings, are dusky mixed with dove color; the coverts of the tail of a brighter dove color; the waved lines which cross the breast, are more numerous than those on that of the male; and the breast itself of a purer white.

Manners. This is the most pernicious hawk we have; and makes great havoc among pigeons,



- Falco Æsalon.** F. cera pedibusque flavis, capite ferrugineo, corpore supra cœrulescente-cinereo maculis striisque ferrugineis, subtus flavicante - albo, maculis oblongis. *Luth. ind. orn.* 49. *id. Syn.* i. 106. *id. Sup.* i. 29.
- Falco Æsalon.** *Gm. Lin.* 284. **L'Esmerillon.** *Belon* ac. 118.
- Æsalon.** *Gesner* ac. 44. **Merlina** *Turneri.* **Smerlus, Smerillus.** *Aldr.* ac. i. 187. *Wil. orn.* 85. *Raii syn.* ac. 15. **L'Emerillon.** *Brisson* ac. i. 382. *Hist. d'oïs.* i. 288. *Pl. Enl.* 468. **Smerlio, o Smeriglio.** *Lo- renzi* av. *Tab.* 18, 19. *Br. Zool.* 70. plate A. 12.
23. *Merlin.**

THE merlin weighs nearly five ounces and a half: its length is twelve inches, its breadth twenty-five. The bill is of a bluish lead color: the cere of a lemon color: the irides very dark, almost black: the head is ferruginous, and each feather is marked with a bluish black streak along the shaft. The back and wings are of a deep bluish ash color, adorned with ferruginous streaks and spots, and edged with the same: the quill feathers are almost black, marked with reddish oval spots: the under coverts of the wings brown, beautifully marked

Description.

* Merularius; quia merulas insectatur. *Skinner.*

with round white spots. The tail is five inches long, crossed with alternate bars of dusky and reddish clay color; on some of the feathers of the same bird are thirteen, on some fifteen, but in one bird I examined were no more than eight bars. The breast and belly are of a yellowish white, marked with oblong brown spots pointing downwards: the legs yellow: the wings when closed reach within an inch and a half of the end of the tail.

Manners. This and the preceding kind were often trained for hawking: and this species, small as it is, was inferior to none in point of spirit: it was used for taking partridges, which it would kill by a single stroke on the neck. The merlin flies low, and is often seen along the sides of roads, skimming from one side of the hedges to the other, in search of prey.

It does not breed in England, but migrates



its* nest was valued at twenty-four pence. They made use of four other species, but have left us only their names; the *hebog* or hawk, whose nest was estimated at a pound; the *gwalch*'s or falcon's at one hundred and twenty pence; the *hwyedig*'s or long winged, at twenty-four pence; and a species called *cammin* or crooked bill, at four pence. The *penheboggydd* or chief falconer, held the fourth place at the court of the *Welsh* prince: but notwithstanding the hospitality of the times, this officer was allowed only three draughts out of his horn, lest he should be fuddled and neglect his birds.†

* *Leges Wallicæ*, 253.

† *Ib.* 24.

GENUS II. OWL.

HEAD large round.

BILL strong hooked, no cere.

FEATHERS round the face disposed in a circular form.

TOE outmost, capable of being turned back, and doing the office of a hind toe.

TONGUE divided.

*EARED.

- | | |
|---|--|
| 1. <i>Eagle</i> . <i>Strix</i> <i>Bubo</i> . <i>S. capite auricu-</i> | <i>Berg Uggie</i> , <i>Katogi hane</i> . |
| <i>lato</i> , corpore rufo. <i>Lath.</i> | <i>Strom. Sondm.</i> 222. |
| <i>ind. orn.</i> 51. <i>id.</i> <i>Syn.</i> i. | <i>Bubu. Kram. Austr.</i> 323. |
| 116. <i>id.</i> <i>Sup.</i> i. 40. | <i>Sova. Scopoli.</i> No. 7. |
| <i>Bubo maximus nigri et fusc</i> | <i>Le grand duc. Brisson</i> i. |
| <i>coloris. Sib. Scot.</i> 14. | 477. <i>Hist. d'ois.</i> i. 332. |
| <i>Great Owl, or Eagle Owl.</i> | <i>Tate. 22. Ill. Ench.</i> 214. |

thered game. Its appearance in cities was deemed an unlucky omen; *Rome* itself once underwent a lustration, because one of them strayed into the *Capitol*. The antients had them in the utmost abhorrence, and thought them, like the screech owls, the messengers of death. *Pliny* styles it *Bubo funebris et noctis monstrum*.

*Solaque culminibus ferali carmine Bubo
Sæpe queri et longas in fletum ducere voces.*

VIRGIL.

Perch'd on the roof the bird of night complains,
In lengthen'd shrieks, and dire funereal strains.

In size it is almost equal to an eagle. The *Description* irides are bright yellow; the head and whole body finely varied with lines, spots and specks of black, brown, cinereous, and ferruginous; the wings are long; the tail short, marked with dusky bars; the legs thick, covered to the very end of the toes with a close and full down of a testaceous color; the claws great, much hooked and dusky.

2. Long eared.

- Strix Otus. S. capite aurito pennis senis. Lath. ind. orn. 43. id. Syn. i. 121. id. Sup. i. 42.*
L'Hibou cornu. Belon av. 136.
Gesner av. 635.
Asio, seu Otus. Aldr. av. i. 265.
The Horn Owl. Wil. orn. 100.
Raii syn. av. 25.
Noctua aurita. Sib. Scol. 14.
- Strix Otus. Gm. Lin. 286.*
Le moyen Duc ou le Hibou. Brisson av. i. 486. Hist. d'ois. i. 342. Tab. 23.
Horn-uggla. Faun. Suec. sp. 71.
Hasselquist itin. 233.
Horn Ugle. Brunnich 16.
Horn-eule. Kram. 323.
Mala Sova. Scopoli. No. 9.
Rothe Kautzlein. Frisch. i. 99.
Br. Zool. Plate 4. f. 1. Arct. Zool. i. 264.

THIS species is found, though not frequently, in the north of *England*, in *Cheshire* and in *Wales*. The weight of the female, according to Mr. *Willughby* (for we never had an opportunity of weighing it) is ten ounces; the

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ing downwards; the thighs and vent feathers are of the same color, but unspotted. The back and coverts of the wings are varied with deep brown and yellow : the quill feathers are of the same color, but near the ends of the outermost is a broad bar of red ; the tail is marked with dusky and reddish bars, but beneath appears ash colored; the horns or ears are about an inch long, and consist of nine feathers variegated with yellow and black; the feet are feathered down to the claws.

- | | |
|---|--|
| Strix brachyotos. S. capite auritopennasolitaria, corpore fusco subtus flavescente longitudinaliter striato, rectricibus fuscis, intermedii, 4 macula lutea pupilla fusca. <i>Lath. ind. orn.</i> 55. <i>id. Syn.</i> i. 124. <i>id. Sup.</i> i. 43. <i>Sup.</i> ii. 56. | Strix brachyotos. <i>Gm. Lin.</i> 3. <i>Short eared.</i> 289.
La Chouette ou la grande chevêche. <i>Hist. d'oïs.</i> i. 372. <i>Pl. Enl.</i> 438.
Moyen duc ou hibou. <i>Pl. Enl.</i> 29?
<i>Phil. Trans.</i> lxii. 384.
<i>Br. Zool.</i> 71. <i>Tab.</i> B. 3. and B. 4. <i>Fig.</i> 2. <i>Arct. Zool.</i> i. 265. |
|---|--|


THE horns of this species are very small, and consist of only a few feathers; these it can raise or depress at pleasure; in a dead bird

1 • 2

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they are with difficulty discovered. This kind is scarcer than the former. Both are solitary birds, avoiding inhabited places. They may be called long winged owls; the wings when closed reaching beyond the end of the tail, whereas in the common kinds, they fall short of it.

This is a bird of passage, and has been observed to visit *Lincolnshire* the beginning of *October*, and to retire early in the spring; so probably, as it performs its migrations with the woodcock, its summer retreat is *Norway*. During the day it lies hid in long old grass: when disturbed it seldom flies far, but will light and sit looking at its observer, at which time the horns may be seen very distinctly. It has not been known to perch on trees, like other owls: it will also fly in search of prey in cloudy hazy weather. Farmers are fond of seeing these



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The length of the short eared owl is fourteen inches; its extent three feet; its weight fourteen ounces. The head is small and hawk-like; the bill is dusky; the circle of feathers that immediately surrounds the eyes is black; the larger circle white, terminated with tawny and black; the irides yellow; the feathers on the head, back and coverts of the wings, are brown edged with pale dull yellow; the breast and belly are of the same color, marked with a few long narrow streaks of brown pointing downwards; the thighs, legs and toes, are covered with plain yellow feathers; the quill feathers are dusky, barred with red; the tail is of a very deep brown, adorned on each side the shaft of the four middle feathers with a yellow circle which contains a brown spot; the tip of the tail is white.

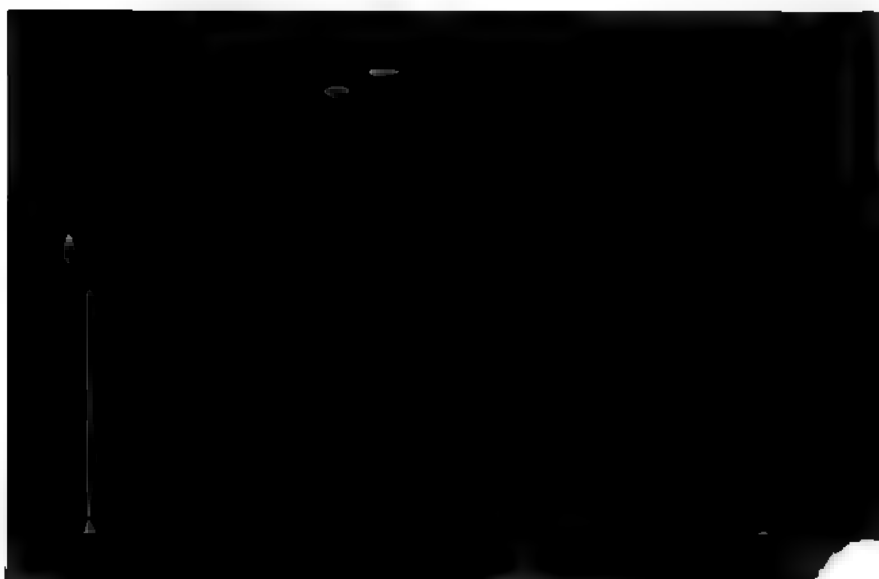
The short eared owl appears to me to be *La Chouette* of the *comte de Buffon*, and his *moyen duc ou hibou*, Tab. 29 of the *Pl. Enl.* In p. 102 of my index to his *Ornithologie* and the *Planches enluminees* I have endeavoured to clear up the confusion which the illustrious writer has introduced on the subject.*

* *Arct. Zool.* i. 266.

The other *European* horned owl, the little horn owl, *Scops* or *Petit Duc* of *M. de Buffon*, I. 353. is unknown in *Great Britain*.

**SMOOTH HEADED.

4. *White*, *Strix flammea*. *S. capite laevi*, *Rati syn. av. 25.*
corpore luteo punctis al. *Le petit Chat-huant. Bris-*
bis, subtus albido punctis *son av. i. 503.*
nigricantibus. Lath. ind. *Allocco. zinan. 99.*
orn. 60. id. Syn. 138. id. *Strix flammea. Gm. Lin.*
Sup. i. 46. *293.*
*Belon av. 143.** *Faun. Suec. 73.*
Aluco minor. Aldr. av. i. *L'Effraie. Hist. d'oïz. i.*
272. *366. Pl. Enl. 440.*
Common barn, white, or *Perl-Eule. Frisch. i. 97.*
church Owl, Howlet, madge *Br. Zool. 71. plate B. Arct.*
Howlet, Gillhowter. Wil. *Zool. i. 272.*
orn. 104.



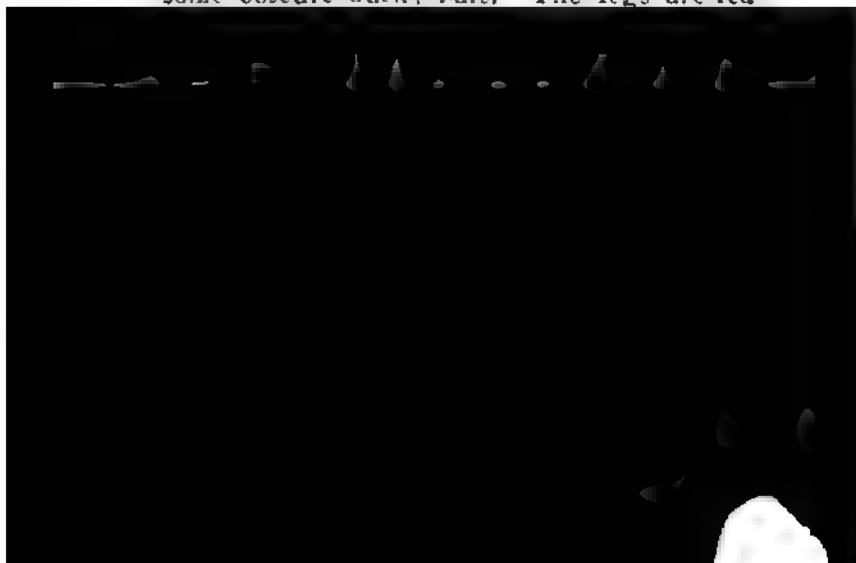
takes a regular circuit round the fields, skimming along the ground, in quest of field mice, and then returns to its usual residence: in the breeding season it takes to the eaves of churches, holes in lofty buildings, or hollows of trees. During the time the young are in the nest, the male and female alternately sally out in quest of food, make their circuit, beat the fields with the regularity of a spaniel, and drop instantly on their prey in the grass. They very seldom stay out above five minutes; return with their prey in their claws; but as it is necessary to shift it into their bill, they always alight for that purpose on the roof, before they attempt to enter their nest.

This species I believe does not hoot, but snores and hisses in a violent manner; and while it flies along, will often scream most tremendously. Its only food is mice; as the young of these birds keep their nest for a great length of time, and are fed even long after they can fly, many hundreds of mice will scarcely suffice to supply them with food.

Owls cast up the bones, fur or feathers of their prey in form of small pellets, after they have devoured it, in the same manner as hawks

do. A gentleman, on grubbing up an old pollard ash which had been the habitation of owls for many generations, found at the bottom many bushels of this rejected stuff. Some owls will, when they are satisfied, hide, like dogs, the remainder of their meat.

Description. The elegant plumage of this bird makes amends for the uncouthness of its form. A circle of soft white feathers surrounds the eyes; the upper part of the body, the coverts and secondary feathers of the wings are of a fine pale yellow; on each side the shafts are two grey and two white spots placed alternately; the exterior sides of the quill feathers are yellow; the interior white, marked on each side with four black spots; the lower side of the body is wholly white; the interior sides of the feathers of the tail are white; the exterior marked with some obscure dusky bars. The legs are fea-



- Strix stridula*. S. capite lævi, corpore ferrugineo, remige tertio longiore. *Lath. ind. orn.* 58. *id. Syn.* i. 139. *Ulula. Gesner av.* 773. *Strix. Aldr. av.* i. 285. Common brown or ivy Owl. *Wil. orn.* 102. *Raii syn. av.* 25. Le Chat huant. *Brisson av.* i. 500. *Hist. d'oïs.* i. 362. *Pl. Enl.* 337. *Strige. Zinan.* 100. *Sco- poli. No.* 12. *Strix stridula. Gm. Lin.* 294. *Skrik uggla. Faun. Succ.* 77. *Strix Orientalis. Hasselquist itin.* 233. *Nacht Eule, Gemeine. Kram.* 324. *Braune-Eule, or Stock-Eule? Frisch.* i. 96. *Nat Ugle. Brunnich* 18. *Br. Zool.* 72. plate B. 3. *Arct. Zool.* i. 275. 5. Tawny Owl.

THIS is the *Strix* of *Aldrovandus*, and, what we call the *Screech Owl*, to which the folly of superstition had given the power of presaging death by its cries. The antients believed that it sucked the blood of young children; a fact not incredible, for *Hasselquist** describes a species found in *Syria*, which frequently in the evening flies in at the windows, and destroys the helpless infant.

Nocte volant puerosque petunt nutricis egentes,
Et vitiant cuneis corpora rapta suis.

* *Itin.* 255.


Carpere dicuntur lactentia viscera rostris,
Et plenum potò sanguine guttur habent.
Est illis strigibus nomen, sed nominis hujus
Causa quod horrenda stridere nocte solent.

Ovid. Fast. VI. 135.

This is the bird *Shakespeare* describes so poetically in the *Midsummer Night's Dream*, as the omen of death in the mouth of *Puck*.

Now the wasted brands do glow,
Whilst the scritch-owl scritch'ing loud
Puts the wretch that lies in woe
In remembrance of a shroud.

Description. The female of this species weighs nineteen ounces; the length is fourteen inches; the breadth two feet eight inches. The irides are dusky; the ears in this, as in all owls, very large, and their sense of hearing very exquisite. The color of this kind is sufficient to distinguish it from every other; that of the



with pale red and black; in the two middle feathers the red predominates; the breast and belly are yellowish, mixed with white, and marked with narrow black strokes, pointing downwards; the legs are covered with feathers down to the toes.

This is a hardier species than the former; and the young will feed on any dead thing, whereas those of the white owl must have a constant supply of fresh mice.


- | | |
|--|--|
| Strix Aluco. S. capite lævi corpore ferrugineo, iridibus atris. <i>Lath. ind. orn.</i> 59. <i>id. Syn.</i> i. 134. | 507. <i>Hist. d'ois.</i> i. 358. *5. <i>Brown, Pl. Enl.</i> 441. |
| The grey Owl. <i>Wil. orn.</i> 103. | Strix Aluco. <i>Gm. Lin.</i> 292. <i>Faun. Suec.</i> 78. |
| <i>Raii syn.</i> av. 26. | Ugle. <i>Brunnich</i> 19. |
| La Hulote. <i>Brisson av.</i> i. | Graue Eule? <i>Frisch.</i> i. 94, <i>Br. Zool.</i> 72. plate B. 1. |

AS the names this and the preceding species* bears by no means suit their colors, we have taken the liberty of changing them to others more congruous. Both these kinds agree en-

* The distinction between the brown and tawny owls consisting only in a trifling variety of color, Dr. *Latham*, in the second supplement to his *Synopsis* of birds, is of opinion, that they ought to be included in one species. Ed.

Description tirely in their marks, and differ only in the colors; in this the head, wings, and back, are of a deep brown, spotted with black in the same manner as the former; the coverts of the wings and the scapulars are adorned with similar white spots; the exterior edges of the four first quill feathers in both are serrated; the breast in this is of a very pale ash color mixed with tawny, and marked with oblong jagged spots; the feet too are feathered down to the very claws; the circle round the face is ash-colored, spotted with brown.

Both these species inhabit woods, where they reside the whole day; in the night they are very clamorous; and when they hoot, their throats are inflated to the size of a hen's egg. In the dusk they approach our dwellings: and will frequently enter pigeon houses, and make great havoc in them. They destroy numbers



- Strix passerina*. *S. capite lævi*, remigibus maculis quinque ordinum. *Lath. ind. orn.* 65. *id. Syn.* i. 150. *La Cheveche. Belon av.* 140. *Noctua. Gesner av.* 620. *Little Owl. Wil. orn.* 105. *Raii syn. av.* 26. *Edw.* 228. *Tschiauitl. Kram.* 324. *Faun. Suec.* 79. *La petite Chouette, ou la Cheveche. Brisson av.* i. 514. *Hist. d'oïs.* i. 377. *Pl. Enl.* 439. *Strix passerina. Gm. Lin.* 296. *La Civetta. Olin, 65. Scopoli, No.* 17. *Krak-Ugle. Brunnich* 20. *Kleinste Kautzlein. Frisch.* i. 100. *Br. Zool.* 73. plate B. 5. *Arct. Zool.* i. 274.

THIS elegant species is very rare in *England*; it is sometimes found in *Yorkshire, Flintshire*, and also near *London*. In size it scarcely exceeds a thrush, though the fulness of its plumage makes it appear larger. The irides are of a light yellow; the bill of a paper color; the feathers that encircle the face are white tipped with black; the head brown, spotted with white; the back and coverts of the wings of a deep olive brown; the latter spotted with white; on the breast is a mixture of white and brown; the belly is white, marked with a few brown spots; the tail of the same color with the back; in each feather barred with white, and adorned

with circular white spots, placed opposite one another on both sides the shaft; the legs and feet are covered with feathers down to the claws.

The *Italians* made use of this owl to decoy small birds to the limed twig; the method of which is exhibited in *Olina's uccelliera*, p. 65.

Mr. *Stuart*, the admirable author of the *Antiquities of Athens*, informed me that this species of owl was very common in *Attica*; that they were birds of passage, and appeared there the beginning of *April* in great numbers; that they bred there; and that they retired at the same time as the *Storks*, whose arrival they a little preceded.

SECT. II. PIES.

GENUS III. SHRIKE.

BILL strong, strait at the base, and hooked at the end with a sharp process or tooth on each side near the point of the upper mandible.

TONGUE jagged.

Lanius excubitor. L. cauda
cuneiformi, lateribus alba,
dorso cano, alis nigris, ma-
cula alba. *Lath. ind. orn.*
67. *id. Syn.* i. 160.

La grande Pie-griesche. *Be-*
lon av. 126.

Lanius cinereus. *Gesner av.*
579.

Skrike, nyn murder *Turneri.*
Lanius cinereus, Collurio
major. *Aldr. av.* i. 199.

Castrica, Ragastola. *Olin,* 41.

Greater Butcher Bird, or
Mattagess; in the *North*
of England, Wierangle.
Wil. orn. 87.

Raii syn. *av.* 18.

Speralster, Grigelaister, Ne-
untodter. *Kram.* 364.

Butcher Bird, Murdering Bird

or Skreek. *Mer. Pinar,* 1. *Raven.*
170.

Cat. Carol. app. 36.

Night Jar. *Mort. Nor-*
thampt. 424.

La Pie-griesche grise. *Brts-*
son av. ii. 141. *Hist. d'oïs.*
i. 296. *Pl. Enl.* 32. f. 1.
445.

Lanius excubitor. *Gm. Lin.*
300.

Warfogel. *Faun. Suec.* 80.

Danish Torn-Skade. *Nor-*
vegis Klavert. *Br.* 21, 22.

Velch Skrakoper. *Scopoli,*
No. 18.

Berg Aelster (Mountain
Magpie) or grosser Neun-
todter. *Frisch.* i. 59.

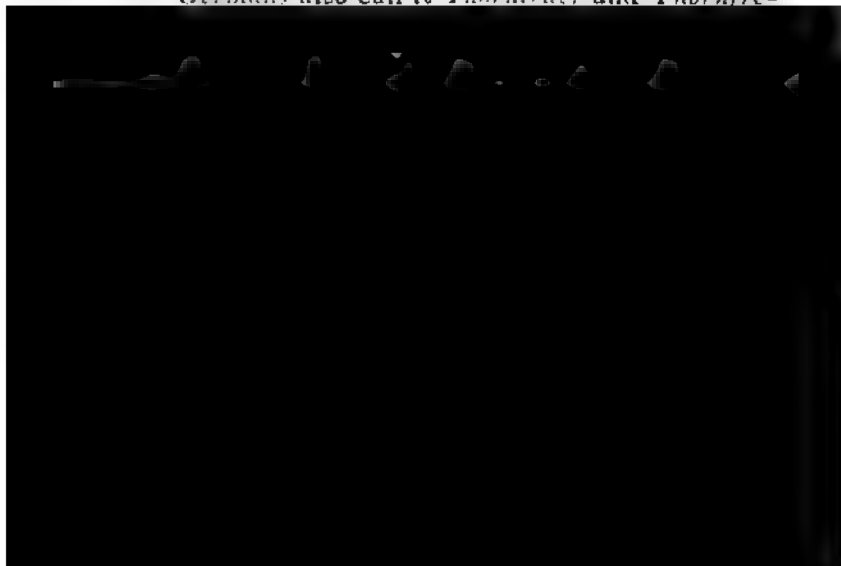
Br. Zool. 73. plate C. *Arct.*
Zool. i. 378.

THIS bird weighs three ounces : its length is Sixe.

ten inches; its breadth fourteen. The bill is black, one inch long, and hooked at the end; the upper mandible furnished with a sharp process: the nostrils are oval, covered with black bristles pointing downwards: the muscles that move the bill are very thick and strong, which makes the head very large.

This apparatus is quite requisite in a species

Manners. whose method of killing its prey is so singular, and whose manner of devouring it is not less extraordinary: small birds it will seize by the throat, and strangle;* which probably is the reason the *Germans* call this bird *Wurchangel*,† or the suffocating angel. It feeds on small birds, young nestlings, beetles and caterpillars. When it has killed the prey, it fixes them on some thorn, and when thus spitted pulls them to pieces with its bill: on this account the *Germans* also call it *Thorndrücker* and *Thornfre-*



birds strength sufficient to tear their prey to pieces with their feet, as the hawks do, they are obliged to have recourse to this artifice.

It makes its nest with heath and moss, lining *Nest.* it with wool and gossamer, and lays six eggs, of a dull olive green, spotted at the thickest end with black.

The crown of the head, the back, and the *Description* coverts which lie immediately on the joints of the wings are ash-colored; the rest of the coverts black: the quill feathers are black, marked in their middle with a broad white bar; and except the four first feathers, and the same number of those next the body, are tipped with white. The tail consists of twelve feathers of unequal lengths, the middle being the longest; the two middlemost are black, the next on each side tipped with white, and in the rest the white gradually increases to the outermost, where that color has either entire possession, or there remains only a spot of black. The cheeks are white, but crossed from the bill to the hind part of the head with a broad black stroke: the throat, breast and belly are of a dirty white: the legs are black. The female is of the same color with the male, the breast and

300 RED BACKED SHRIKE. CLASS H.

belly excepted, which are marked transversely with numerous semicircular brown lines,

2. Red-backed.

Lanius Collurio. L. cauda sub-cuneiformi, dorso griseo, rectricibus 4 intermedii unicoloribus, rostro plumbeo. *Lath. ind. orn.* 69. *id. Syn.* 1. 167. *id. Sup.* 1. 52.

La petite Pie griesche grise. *Belon av.* 128.

Lanius tertius. *Aldr. av.* 1. 199.

Lesser Butcher Bird, called in *Yorkshire* *Flusher*. *Wil. orn.* 82. *sp.* 2. the male. 89. *sp.* 3. the female.

Rati syn. av. 18.

Danish Tornskade. Norv. Hantvark. Br. 23.

Mort. Northampton. 424.

L'Ecorcheur. *Brisson av.* ii. 151. *Hist. d'ois.* 1. 304. *Pl. Ent.* 31. f. 2.

Lanius Collurio. Gm. Lin.

[XVI]

Faun. Suec. 81. *Tab.* ii. f. 181.

Dorngreal, Dornheher, *Kram.* 363.

Bufferola, Ferlotta rossa, *Sinan.* 91.

Br. Zool. 74. plate C. 1. *Arct. Zool.* 1. 280.

Mali Skrakoper. *Scopoli.* No. 19.

CLASS II. RED BACKED SHRIKE. 301

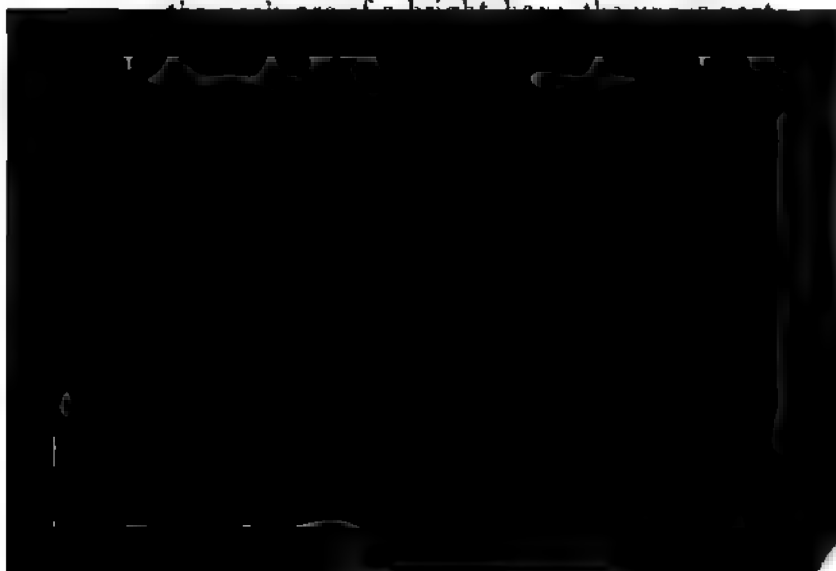
and coverts of the wings, are of a bright ferruginous color; the breast, belly and sides are of an elegant blossom color; the two middle feathers of the tail are longest, and entirely black; the lower part of the others white, and the exterior webs of the outmost feather on each side wholly so. In the female the stroke *Female.* across the eyes is of a reddish brown; the head of a dull rust color mixed with grey; the breast, belly and sides of a dirty white, marked with semicircular dusky lines. The tail is of a deep brown; the outward feather on each side excepted, whose exterior webs are white.

These birds build their nests in low bushes, and lay six eggs of a white color, but encircled at the bigger end with a ring of brownish red.

They arrive in *Italy* in *April*, go away in *September*; visit *England* in *May* and depart in *September*.

- Lanius rutilus*. L. supra tricolor, subtus rufescentialbus, scapularibus totis, rectricibus a basi ad medium, lateralibus apice albis, fascia oculari nigra. *Lath. ind. orn.* 70. *id. Syn.* i. 169. *id. Sup.* ii. 70.
- Lanius minor primus*. *Aldr.* av. i. 200.
- Another sort of Butcher Bird. *Wil. orn.* 89. *sp.* 4.
- The Wood-chat. *Rati syn.* av. 19. *sp.* 6.
- Lanius Collurio*. *Gm. Lin.* 301. *γ.*
- Dorngreul mit rother platten. *Kram.* 363.
- LaPie griesche rousse. *Brisson av.* ii. 147. *Hist. d'oie.* i. 301. *Pl. Enl.* 9. f. 2. and 31.
- Buferola, Felotta biancar. *Sinan.* 89.
- Kleiner Neuntoedter. *Frisch.* i. 61.
- Br. Zool.* 74. plate C. 2.

Description. IN size it seems equal to the preceding. The bill is horn colored; the feathers that surround the base are whitish; above is a black line drawn across the eyes, and then downwards on each side the neck; the head and hind part of



CLASS II. WOOD CHAT.

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edges and tips of the rest white; the legs black.

The female differs; the upper part of the *Female* head, neck and body are reddish, striated transversely with brown; the lower parts of the body are of a dirty white, rayed with brown; the tail is of a reddish brown, marked near the end with dusky, and tipt with red.

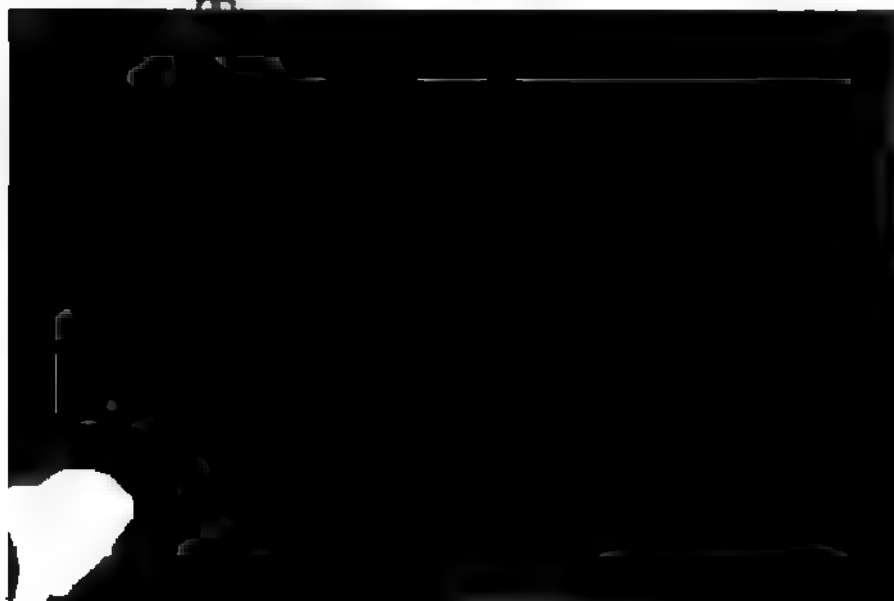
GENUS IV.

BILL strait, strong, somewhat convex.

NOSTRILS covered with bristles reflected down.

TONGUE cartilaginous, cloven.

1. *Raven.* *Corvus corax.* *C. ater*, dorso
 cærulescente, cauda sub-
 rotunda. *Lath. ind. orn.* *Hist. d'oïs.* iii. 13. *Pl.*
 150. *id. Syn.* i. 367. *id.* *Ent.* 495.
Sup. i. 74. *id. Sup.* ii. 106. *Velch oru. Scopoli. No.* 35.
Le Corbeau. Belon av. 279. *Corvus corax. Gm. Lin.* 364.
Corvus. Gesner av. 334. *Korp. Faun. Suec.* 85.
Corvo, Corbo. Aldr. av. i. 343. *Danish Raun. Norv. Korp.*
Wil. orn. 121. *Br.* 27.
Raii syn. av. 39. *Rab. Kram.* 333. *Frisch.*
LeCorbeau. Brisson av. ii. 8. *i.* 63.
Br. Zool. 75. *Arct. Zool. i.*
 286.



brownish spots. They frequent in numbers the neighborhood of great towns, and are held in the same sort of veneration as the vultures are in *Egypt*,* and for the same reason; devouring the carcasses and filth, that would otherwise prove a nuisance. A vulgar respect is also paid to the raven, as being the bird appointed by Heaven to feed the prophet *Elijah*, when he fled from the rage of *Ahab*.† They are docile, may be taught to speak, and fetch and carry. In clear weather they fly in pairs to a great height, making a deep loud noise, different from the common croaking. Their scent is remarkably good; and their life prolonged to a long period.

The quills of ravens sell for twelve shillings the hundred, being of great use in tuning the lower notes of a harpsichord, when the wires are set at a considerable distance from the sticks.

In *Italy* the raven quits the snbalpine woods in *October*, and spreads over the lower countries; it returns to the woods in *April*.

* *Hasselquist itin.* 2.

† *1 Kings* 17.

2. *Carrion.* *Corvus corone*. *C. atro-caeruleus* totus, cauda rotundata, rectricibus acutis. *Rati syn. av.* 39.
Lath. ind. orn. 151. *id.* *La Corbine. Hist. d'ois.* iii.
Syn. i. 370. *id. Sup. i.* 75. *45. Pl. Enl.* 483.
id. Sup. ii. 108. *La Corneille. Brisson av.*
Corvus corone. Gm. Lin. 12.
La Corneille. Belon av. 281. 365.
Cornix (Krae). Gesner av. *Faun. Suec.* 86.
320. *Krae. Br.* 30.
Cornice, Cornacchio. Aldr. Br. Zool. 75. *Arct. Zool. i.*
av. i. 369. 287.
Will. orn. 122. *Oru. Scopoli, No.* 36.

THE crow in the form of its body agrees with the raven; also in its food, which is carrion and other filth. It will also eat grain and insects, and like the raven will pick out the eyes of young lambs, when just dropped; for which reason it was formerly distinguished from the rook, which feeds entirely on grain and insects, by the name of the *gor* or *gore-crow*, thus *Ben Jonson* in his *Fox*, act I. scene 2.

England breeds more birds of this tribe than any other country in *Europe*. In the twenty-fourth of *Henry VIII.* they were grown so numerous, and thought so prejudicial to the farmer, as to be considered an evil worthy of parliamentary redress: an act was passed for their destruction, in which rooks and choughs were included. Every hamlet was to provide crow nets for ten years, and all the inhabitants were obliged at certain times to assemble during that period to consult the properest method of extirpating them.

Though the crow abounds in our country, yet in *Sweden* it is so rare, that *Linnaeus* mentions it only as a bird that he once knew killed there.

Crows lay the same number of eggs as the raven, and of the same color: immediately after deserting their young, they go in pairs. Both these birds are often found white, or pied; an accident that befalls black birds more frequently than those of any other color. I have also seen one entirely of a pale brown color, not only in its plumage, but even in its bill and feet. The crow weighs about twenty

ounces. Its length is eighteen inches; its breadth two feet two inches.

They come from *Hungary* into *Italy* in *March*, and re-migrate in flocks in *October*; many remain during the winter.

- 3. Rook.** *Corvus frugilegus*. *C. ater*, *Corvus frugilegus*. *Gm. Lin.*
fronte cinerascens, cauda 366.
subrotundata. Lath. ind. *Le Freux, ou la Frayonne.*
orn. 152. id. Syn. i. 372. *Hist. d'oïis. liii. 55. Pl.*
id. Sup. i. 76. id. Sup. ii. *Ent. 484.*
109. *La Corneille Moissonense.*
La Graye, Grolle, ou Freux. *Brisson av. ii. 16.*
Belon av. 283. *Roka. Fann. Succ. 87.*
Corvus frugivora (Roock.) *Spermologus, seu frugilega.*
Gesner av. 332. *Caii opusc. 100.*
Aldr. av. i. 378. *Schwartzes kran, Schwartzes*
W'd. orn. 123. *krähe, Kram 333. Frisch.*
Rat. syn. av. 39. *i. 64.*
Bo. Zool. 75. Arct. Zool.


This bird differs not greatly in its form from *Description* the carrion crow; the colors in each are the same, the plumage of both being glossed with a rich purple. But what chiefly distinguishes the rook from the crow is the bill; the nostrils, chin, and sides of that and the mouth being in old birds white and bared of feathers, by often thrusting the bill into the ground in search of the *crucæ* of the Dor-beetle;* the rook then, instead of being proscribed, should be treated as the farmer's friend; as it clears his ground from caterpillars, which do incredible damage by eating the roots of the corn. In *Suffolk* and part of *Norfolk*, the farmers find it their interest to encourage these birds. Mr. *Matthews*, a most excellent and observant farmer in *Berkshire*, assured Mr. *Stillingfleet*, that the rooks one year, while his men were hoeing a field of turnips, settled on a spot where they were not at work, and that the crop proved very fine in that part, whereas in the remainder it failed.† Rooks are sociable birds, living in vast flocks: crows go only in pairs. They

* *Scarabæus melolontha*. *Lin. syst.* 351. *Ræsel*, ii. *Tub.* i. *List. Goed.* 265.

† *Stillingfleet's Tracts*, 2d edit. 175.

begin to build their nests in *March*; one bringing materials while the other watches the nest, lest it should be plundered by its brethren: they lay the same number of eggs as the crow, and of the same color, but smaller. After the breeding season rooks forsake their nest-trees, and for some time go and roost elsewhere, but return to them in *August*: in *October* they repair their nests,* quit their nest-trees again in the depth of winter and roost in other woods, till *February*, when they select their mates.

In *France* and *Silesia*, these birds are migratory; in the former they appear at the approach of winter; in the latter they announce by their arrival, the return of summer.† According to *Ekmark*, who made his remarks in *Ostrogothland*, they arrive in that province of *Sweden* about the beginning of *April*, and leave it in autumn.‡




- Corvus Cornix.** *C. cinerascens*, capite jugulo alis caudaque nigris. *Lath. ind. orn.* 153. *id. Syn.* i. 374. *id. Sup.* i. 77. *id. Sup.* ii. 109.
- La Corneille emantelée.** *Be-lon av.* 285.
- Cornix varia, Marina, Hy-berna (Nabelfrae.)** *Ges-ner av.* 332.
- Cornix cinerea.** *Aldr. av.* i. 379.
- Raii syn. av.* 39.
- Martin's West. Isles,* 376.
- Hooded Crow.** *Sib. Scot.* 15.
- La Corneille mantelée.** *Bris-4. Hooded.* *son av.* ii. 19. *Hist. d'ois.* iii. 61. *Pl. Enl.* 76.
- Mulacchia cinerizia, Mo-nachia.** *Zinan.* 70.
- Corvus cornix.** *Gm. Lin.* 366.
- Kraka.** *Faun. Suec. sp.* 88.
- Grave Kran, Kranveitl.** *Kram.* 333.
- Graue-Krøche (grey-Crow), Nebel-Krøche (mist-Crow).** *Frisch.* i. 65.
- Urana.** *Scopoli. No.* 37.
- Br. Zool.* 76. plate D. i.
- Arct. Zool.* i. 293.

THE weight of this species is twenty-two ounces: the length twenty-two inches; the breadth twenty-three. The head, under side of the neck, and wings are black, glossed over with a fine blue; the breast, belly, back, and upper part of the neck, are of a pale ash color; the irides hazel; the legs black, and weaker than those of the Rook. The bottom of the toes are very broad and flat, to enable them to walk without sinking on marshy and

muddy grounds, where they are conversant.

In *England* hooded crows are birds of passage, coming and going with the woodcock, and are found both in inland and maritime places. *Belon*, *Gesner*, and *Aldrovandus* agree, that they are migratory in their respective countries, resorting in the breeding time to high mountains. They breed also in the southern parts of *Germany* on the banks of the *Danube*,* and extend as far north as *Norway* and *Finmark*.† They are found in all parts of *Russia* and *Siberia*, but never are seen beyond the *Lena*; to the east of the *Oby* they are very large, and often vary to black.

They are very common in *Scotland*; in many parts of the *Highlands*, and in all the *Hebrides*, *Orknies*, and *Shetlands*, are the only species of genuine crow; the *Carrion* and the *Rook* being unknown there. They breed and continue in



Shetland islands, which are destitute of trees, they make their nests in the holes of the rocks; they lay six eggs. They have a shriller note than the common crow, are much more mischievous, pick out the eyes of lambs, and even of horses when engaged in bogs; are therefore in many places proscribed, and rewards given for killing them. For want of other food they will eat cranberries and other mountain berries.

These birds are not gregarious unless when attracted by carrion, or meet accidentally on the shores in search of shell-fish. In spring, before pairing time, they convene in great flocks; each associates with its mate, and then they disperse. They are observed in *Kent* to quit the banks of the *Thames* towards evening, and roost in great numbers promiscuously in the woods.

It is a bird of uncommon affection to its mate; one which had been shot and hung by its legs on a tree adjacent to the nest, was discovered by its companion on returning from forage. It perched over the dead body, surveyed it attentively, as if in expectation of its revival; at length, on a windy day, the corpse

being put in motion, the survivor, deceived by it, descended, fluttering round for a considerable time, endeavouring to release its mate, and uttering a melancholy scream: at last, finding its efforts to be in vain, it retired without ever returning to its usual haunts.

- S. Magpie.** *Corvus Pica. C. albo nigro-* *d'ois. iii. 85. Pl. Enl.*
que varius, canda canel- *488.*
formi. Lath. ind. orn. Gazza, Putta. Zinan. 66.
162. id. Syn. i. 392. id. Corvus Pica. Gm. Lin. 373.
Sup. i. 80. id. Sup. ii. Skata, Skiura, Skara. Faun.
113. Suec. sp. 92.
La Pte. Belon av. 291. Danish Skade, Hrus Skade.
Pica varia et candata. Ges. Noro. Skior, Tunfagl.
ner av. 695. Brunnich 32.
Aldr. av. i. 392. Aelster. Frisch. i. 58.
The Magpie, or Planet. Wil. Alster. Kram. 335.
ora. 127. Praka. Scopoli, No. 38.

known, that it would be impertinent to detain the reader with the particulars.

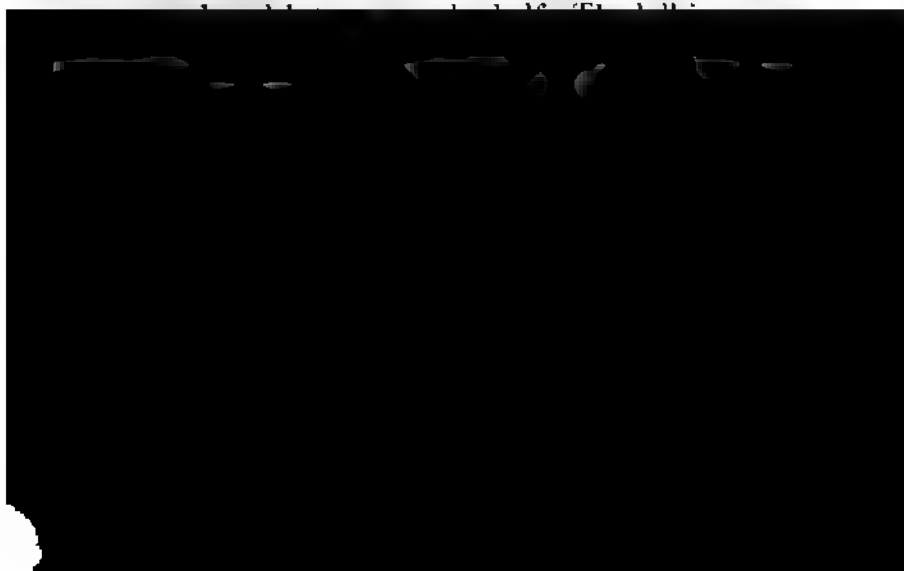
We shall only observe the colors of this bird; its black, its white, its green, and purple, and the rich and gilded combination of glosses on the tail, are at least equal to those that adorn the plumage of any other of the feathered race. It bears a great resemblance to the butcher-bird in its bill, which has a sharp process near the end of the upper mandible; in the shortness of its wings, and the form of the tail, each feather shortening from the two middlemost: it agrees also in its food, which are worms, insects, and small birds. It will destroy young chickens; is a crafty, restless, noisy bird: *Ovid* therefore with great justice styles it,

——Nemorum convicia *Pica*.

Is easily tamed, and may be taught to imitate the human voice. It builds its nest with great art, covering it entirely with thorns, except one small hole for admittance, and lining it with wool and soft materials. It lays six or seven eggs, of a pale green color spotted with brown. The magpie weighs near nine ounces: the length is eighteen inches; the breadth only twenty-four.

- 6. Jay.** *Corvus glandarius*. C. tec.
 tricibus alarum caeruleis,
 lineis transversis albis ni-
 grisque, corpore ferrugi-
 neo variegato. *Lath. ind.*
orn. 157. *id. Syn.* 384. *id.*
Sup. i. 79.
Le Jay. Belon av. 289.
Pica glandaria. Gesner av.
 700.
Aldr. av. i. 393.
Olina, 35.
Wil. orn. 130.
Rall syn. av. 41.
Ghlandais. Zinan. 67.
Corvus glandarius. Gm.
Lin. 368.
Le Gray, Garrulus. Brisson
av. ii. 47. *Hist. d'ois. iii.*
107. Pl. Enl. 481.
Allouskrika, Koroskrika.
Faun. Suec. sp. 90.
Skov-skade. Br. 33.
Nuss-beber. Kram. 335.
Eichen-Heher (Oak-Jay),
or Holtz-Schreyer (Wood-
Cryer). Frisch. i. 55.
Skoia, Schoga. Scopoli, No.
39.
Br. Zool. 77. plate D. *Arct.*
Zool. i. 295.

Description. **THIS** is one of the most beautiful of the
British birds. The weight is between six and
 seven ounces: the length thirteen inches; the



the form of a crest: the whole neck, back, breast and belly, are of a faint purple dashed with grey; the covert feathers of the wings are of the same color. The first quill feather is black; the exterior webs of the nine next are ash-colored, the interior webs dusky: the six next black, but the lower sides of their exterior webs are white tinged with blue; the two next wholly black; the last of a fine bay color tipped with black. The lesser coverts are of a light bay; the greater covert feathers most beautifully barred with a lovely blue, black and white; the rest black: the rump is white. The tail consists of twelve black feathers. The feet are of a pale brown; the claws large and hooked.

The nest is made entirely of the fine fibres of roots of trees, but has for a foundation some coarse sticks; it is generally placed on the top of the underwood, such as hazels, thorns, or low birch. [It lays five or six eggs, of a dull whitish olive, mottled very obscurely with pale brown, and usually marked towards the large end with two or three short irregular black lines.] The young follow their parents till the spring: in the summer they are very injurious

to gardens, being great devourers of pease and cherries; in the autumn and winter they feed on acorns, from whence the Latin name. Dr. *Kramer** observes, that they will kill small birds. Jays are very docile, and may be taught to imitate the human voice: their native note is very loud and disagreeable. When they are enticing their fledged young to follow them, they emit a noise like the mewing of a cat.

* *Kram. clench.* 835.



- Corvus Graculus.** C. violaceo nigricans, rostro pedibusque luteis. *Lath. ind. orn.* 165. *id. Syn.* i. 401. *id. Sup.* i. 82. *id. Sup.* ii. 115.
- Scurapola.** *Belon obs.* 12.
- La Chouette** ou Chouca rouge. *Belon av.* 286.
- Pyrrhocorax gracculus saxatilis** (Stein-taben, Stein-frae). *Gesner av.* 522, 527.
- Spelvier, Taccola.** *Aldr. av.* i. 386.
- Wil. orn.* 126.
- Raii syn. av.* 40.
- Le Crave, ou Coracias.** 7. *Redlegged* *Brisson av.* ii. 4. *Tab.* 1. *Hist. d'oïs.* iii. 1. *Pl. Enl.* 235.
- The Killigrew. *Charlton ex.* 75.
- Cornwall *Kae. Sib. Scot.* 15.
- Borlase Cornw.* 249. *Tab.* 24.
- Camden,* vol. i. 14.
- Corvus Graculus.** *Gm. Lin.* 377.
- Monedula pyrrhocorax.** *Hasselquist itin.* 238.
- Gracula pyrrhocorax.** *Sco. poli,* No. 46.
- Br. Zool.* 83. plate L.*

THIS species is but thinly scattered over the northern world; no mention is made of it by any of the *Faunists*; nor do we find it in other parts of *Europe*, except *England*, and the *Alps*.* In *Asia*, the island of *Candia* produces it.† In *Africa*, *Ægypt*; which last place it visits towards the end of the inundations of the *Nile*.‡ Except *Ægypt*, it affects mountainous

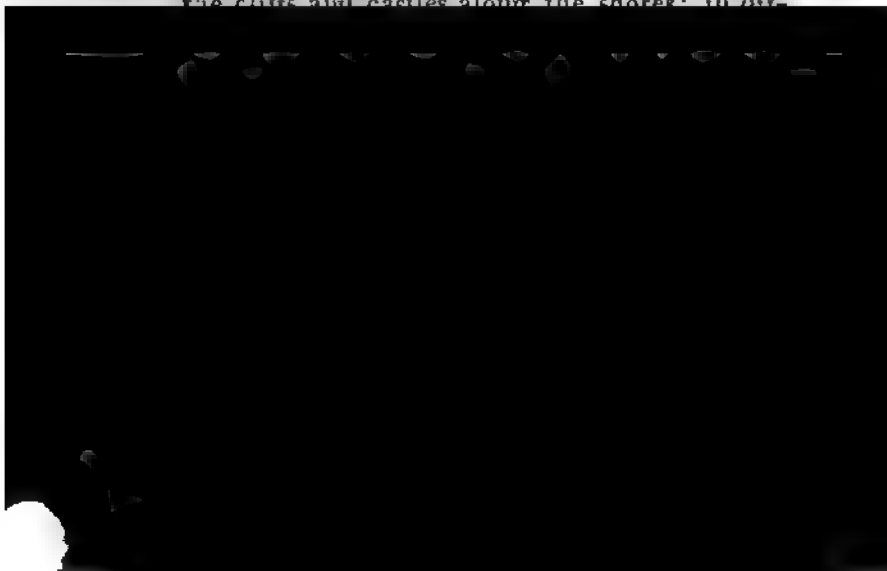
* *Plin. nat. hist. lib. X. c.* 48. *Brisson* ii. 5.

† *Belon obs.* 17.

‡ *Hasselquist itin.* 240.

320 RED LEGGED CROW. CLASS II.

and rocky situations; it builds its nest in high cliffs, or ruined towers, and lays four or five eggs, white spotted with a dirty yellow. It feeds on insects, and also on new sown corn: commonly flies high, makes a shriller noise than the jackdaw, and may be taught to speak. It is a very tender bird, and unable to bear very severe weather; is of an elegant, slender make; active, restless, and thieving; much taken with glitter, and so meddling as not to be trusted where things of consequence lie. It is very apt to catch up bits of lighted sticks, so that there are instances of houses being set on fire by its means; which is the reason that Camden calls it *incendiaria avis*. Several of the *Welsh* and *Cornish* families bear this bird in their coat of arms. It is found in *Cornwall*, *Flin'shire*, *Caernarvonshire*, and *Anglesey*, in the cliffs and castles along the shores: in dif-



ten days at a time, and repeat it several times in the year.

Its weight is thirteen ounces: the breadth thirty three inches; the length sixteen. Its color is wholly black, beautifully glossed over with blue and purple: the legs and bill are of a bright orange, inclining to red: the tongue almost as long as the bill, and a little cloven: the claws large, hooked, and black. *Scopoli* says that in *Carniola* the feet of some, during autumn, turn black.

Corvus Monedula. *C. fusconigricans*, occipite incano, fronte alis caudaque nigris. *Lath. ind. orn.* 154. *id. Syn.* i. 378. *id. Sup.* i. 78.

Chouca, *Chouchette*, ou *Chouette*. *Belon av.* 286.

Gracculus, seu *monedula*. *Gesner av.* 521.

Aldr. av. i. 387.

Wil. orn. 125.

Rati syn. av. 40.

Le Choucas. *Brisson av.* 24.

Hist. d'oïis. iii. 169. *Pl. 8. Jackdaw.* *Enl.* 523.

Scopoli, No. 38.

Mulacchia nera. *Zinan.* 70.

Corvus Monedula. *Gm. Lin.* 367.

Kaja. Faun. Suec. sp. 89.

Danish Alike. Norv. Kaae, Kaye, Raun Kaate, Raage. Br. 31.

Taerl, Dohle, Tschockerl. Kram. 334.

Graue-Dohle. Frisch. i. 67.

Br. Zool. 78. *Arct. Zool.* i. 294.

THE Jack-daw weighs nine ounces: the *Description*

length is thirteen inches; the breadth twenty-eight. The head is large in proportion to its body, which Mr. *Willughby* says argues him to be ingenious and crafty; the irides are white; the forehead is black; the hind part of the head a fine light grey; the breast and belly of dusky hue, inclining to ash-color; the rest of the plumage is black, slightly glossed with blue; the feet and bill black; the claws very strong, and hooked. It is a docile, loquacious bird.

Jackdaws breed in steeples, old castles, and in high rocks; laying five or six eggs. I have known them sometimes to breed in hollow trees near a rookery, and join those birds in their foraging parties. In some parts of *Hampshire* they make their nests in rabbit holes: they also build in the interstices between the upright and transome stones of *St. George's*; a



They migrate from *Italy* in *September*, but are not frequently seen there.

- | | | |
|---|--|-------------------------|
| Corvus caryocatactes. C. fus- | <i>Hist. d'oïis.</i> iii. 122. | <i>Pl. 9. Nutcrack-</i> |
| cus albo punctatus, alis | <i>Enl.</i> 50. | <i>er.</i> |
| caudaque nigris, rectrici- | Notwecka, | Notkraka. |
| bus apice albis, interme- | <i>Faun. Suec.</i> sp. 19. | |
| diis apice detritis. <i>Lath.</i> | Tannen-Heher (Pine-Jay) | |
| <i>ind. orn.</i> 161. <i>id. Syn.</i> i. | <i>Frisch.</i> i. 56. | |
| 400. <i>id. Sup.</i> i. 82. | <i>Edw.</i> 240. | |
| Caryocatactes. <i>Wil. orn.</i> 132. | <i>Danish</i> Notdekridge. <i>Nor-</i> | |
| <i>Raii syn.</i> av. 42. | <i>vegis</i> Not-kraake. <i>Brun-</i> | |
| Nucifraga, le Casse-noix. | <i>nich</i> 34. | |
| <i>Brisson</i> av. ii. 59. <i>Tab.</i> 5. | <i>Br. Zool.</i> 4to. <i>App.</i> 531. | |
| Corvus Caryocatactes. <i>Gm.</i> | <i>Arct. Zool.</i> i. 291. | |
| <i>Lin.</i> 370. | | |

THE specimen we took our description from, is the only one we ever heard was shot in these kingdoms; it was killed near *Mostyn, Flintshire*, October 5, 1753.

It was somewhat less than the jackdaw: the *Description.* bill strait, strong, and black: the color of the whole head and neck, breast and body, was a rusty brown; the crown of the head and the rump were plain; the other parts marked with triangular white spots; the wings black; the coverts spotted in the same manner as the body;

the tail rounded at the end, black tipped with white; the vent-feathers white; the legs dusky.

This bird is also found in most parts of *Europe*. We received a specimen from *Denmark*, by means of Mr. *Brunnich*, author of the *Ornithologia Borealis*, a gentleman to whose friendship we owe a numerous collection of the curiosities of his country.

It feeds on nuts, from whence the name.



GENUS V. ROLLER.

BILL strait, bending a little towards the end, edges cultrated, bare of feathers at the base.

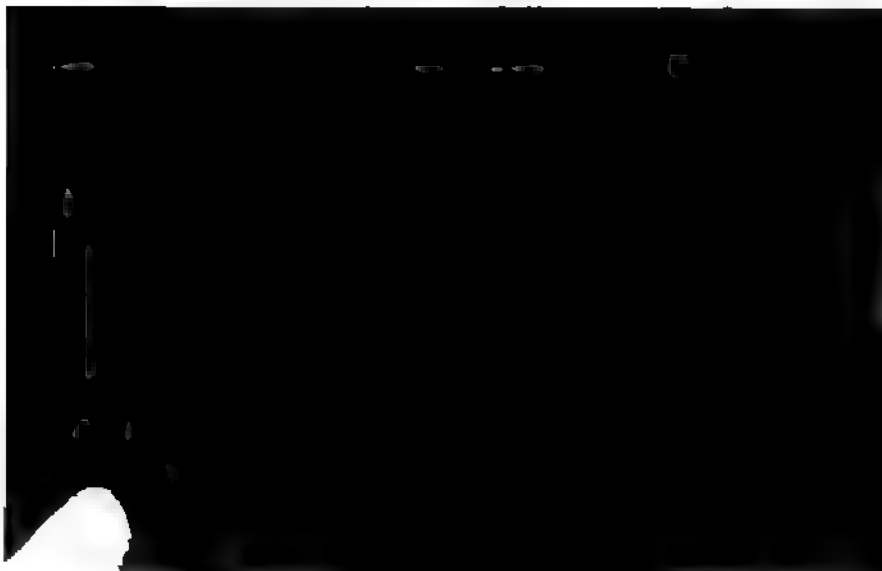
NOSTRILS narrow, naked.

TONGUE cartilaginous, cloven.

- | | | |
|---|--|-------------------|
| Coracias garrula. C. cærulea, dorso rubro, remigibus nigris. <i>Lath. ind. orn.</i> 168. <i>id. Syn.</i> i. 406. <i>id. Sup.</i> i. 85. | Coracias Garrula. <i>Gm. Lin.</i> 1. 378. | <i>Garrulous.</i> |
| Roller. <i>Wil. orn.</i> 131. | Spransk Kraka, Blakraka, Allekraka. <i>Faun. Suec.</i> sp. 94. | |
| Garrulus argentoratensis. <i>Raii syn. av.</i> 41. | <i>Edw.</i> 109. | |
| Galgulus, le Rollier. <i>Brisson av.</i> ii. 64. <i>Tab.</i> 5. <i>Hist. d'oïs.</i> iii. 135. <i>Pl. Enl.</i> 486. | The Shagarag. <i>Shaw's Travels,</i> 252. | |
| | Ellekrage. <i>Brunnich,</i> 35. | |
| | Birk-Heker; Blaue-Racke. <i>Frisch.</i> i. 57. | |
| | <i>Br. Zool.</i> 4to. <i>App.</i> 530. | |
| | <i>Arct. Zool.</i> i. 279. | |

OF these birds we have heard of only two being seen at large in our island; one of which was shot near *Helston-bridge, Cornwall*, and an account of it transmitted to us by the Reverend Doctor *William Borlase*. They are frequent in most parts of *Europe*, and we have received them from *Denmark*.

Description. In size it is equal to a jay. The bill is black, strait, and hooked at the point; the base beset with bristles: the space about the eyes is bare, and naked; behind each ear is also another bare spot, or protuberance; the head, neck, breast, and belly, are of a light bluish green; the back, and feathers of the wings next to it, are of a reddish brown; the coverts on the ridge of the wings are of a rich blue; beneath them of a pale green; the upper part and tips of the quill feathers are dusky; the lower parts of a fine deep blue; the rump is of the same color. The tail consists of twelve feathers, of which the outmost on each side are considerably longer than the rest, are of a light blue, and tipped with black; beneath that a spot of deep blue; as is the case with such part of the quill-feathers that are black above: the other fea-



GENUS VI. ORIOLE.

BILL strait conic, sharp pointed, cultrated,
upper mandible rather longer and slightly
notched at the end.

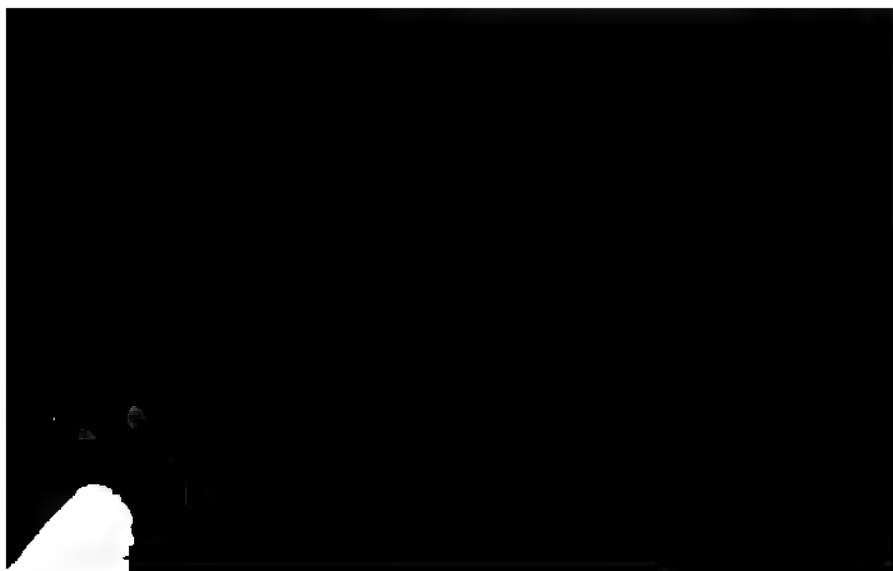
TONGUE sharp and divided.

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|--|--|
| <p>Oriolus Galbula. <i>O. luteus</i>,
loris artubusque uigris,
rectricibus exterioribus
postice flavis. <i>Lath. ind.</i>
<i>orn.</i> 186. <i>id. Syn.</i> ii. 249.
<i>id. Sup.</i> i. 89. <i>id. Sup.</i> ii.
126.</p> <p>Oriolus Galbula. <i>Gm. Lin.</i>
382. <i>Faun. Suec. No.</i>
95.</p> <p><i>Scopoli, No.</i> 45. <i>Kramer</i>,
360.</p> | <p>Oriolus. <i>Gesner av.</i> 713. 1. <i>Golden.</i>
<i>Aldr. av.</i> i. 418.</p> <p>Le Lorient. <i>Brisson av.</i> ii.
320.</p> <p><i>Hist. d'oies.</i> iii. 284. <i>Pl.</i>
<i>Enl.</i> 26.</p> <p>The Witwal. <i>Wil. orn.</i> 198.</p> <p><i>Raii syn. av.</i> 68.</p> <p>Golden Thrush. <i>Edw.</i> 185.
<i>Br. Zool.</i> 4to. <i>App.</i> 532.</p> <p><i>Arct. Zool.</i> ii. 26.</p> |
|--|--|

THIS beautiful bird is common in several parts of *Europe*; where it inhabits the woods, and hangs its nest very artificially between the slender branches on the summits of antient oaks. It lays four or five dirty white eggs, spotted with dark brown chiefly at the larger end. Its note is loud, and resembles its name.

I have heard of only one being shot in *Great Britain*, and that in *South Wales*.

Description It is of the size of a thrush. The head and whole body of the male is of a rich yellow; the bill red; from that to the eye a black line; the wings black, marked with a bar of yellow; the ends of the feathers of the same color; the two middle feathers of the tail black; the rest black, with the ends of a fine yellow: the legs dusky. The body of the female is of a dull green: the wings dusky; the tail of a dirty green; the ends of the exterior feathers whitish.



GENUS VII. CUCKOO.

BILL a little arched, roundish.

TONGUE short, horny at the end, entire.

FEET climbing.

- | | |
|--|---|
| Cuculus canorus. <i>C. cinereus</i> , subtus albidus fusco transversim striatus, cauda rotundata nigricante albo punctata. <i>Lath. ind. orn.</i> 207. <i>id. Syn.</i> ii. 509. <i>id. Sup.</i> i. 98. <i>id. Sup.</i> ii. 133. | Le Coucou. <i>Brisson av.</i> 1. Common. 105. |
| Le Coqu. <i>Belon av.</i> 132. | <i>Hist. d'oïs.</i> vi. 305. <i>Pl. Enl.</i> 811. |
| Cuculus. <i>Gesner av.</i> 362. | Cuculus canorus. <i>Gm. Lin.</i> 409. |
| <i>Aldr. av.</i> i. 20. | <i>Gjok. Faun. Suec. sp.</i> 96. |
| Cuculo. <i>Olinia</i> 38. | <i>Danish Gjoeg v. Kuk. Norv.</i> |
| <i>Wil. orn.</i> 97. | <i>Gouk. Br.</i> 36. |
| <i>Raii syn. av.</i> 23. | Kuckuck. <i>Frisch.</i> i. 40, 41, 42. |
| <i>Jenner in Phil. Tr.</i> 1788. 219. | Kuctuct. <i>Kram.</i> 337. |
| | Kukautza. <i>Scopoli. No.</i> 48. |
| | <i>Br. Zool.</i> 80. plate G. G. 1. |
| | <i>Arct. Zool.</i> i. 312. |

THIS singular bird appears in our country early in the spring, and makes the shortest stay with us of any bird of passage; it is compelled here, as *Mr. Stillingfleet* observes, by that constitution of the air which causes the fig-tree to

put forth its fruit.* From the coincidence of the first appearance of the summer birds of passage, and the leafing and fruiting of certain plants, this ingenious writer would establish a natural calendar in our rural œconomy; to instruct us in the time of sowing our most useful seeds, or of doing such work as depends on a certain temperament of the air. As the fallibility of human calendars need not be insisted upon, we must recommend to our countrymen some attention to these feathered guides, who come heaven-taught, and point out the true commencement of the season;† their food being the insects of those seasons they continue with us.

It is very probable, that these birds, or at least a part of them, do not entirely quit this island during winter, but that they seek shelter



the weather in the last was uncommonly warm, but after that they were heard no more, chilled again as I suppose into torpidity. There is an instance of their being heard in the summer time to sing at midnight. There is a remarkable coincidence between their song, and the season of the mackerel's continuance in full roe; that is from about the middle of *April*, to the latter end of *June*.

The cuckoo is silent for some little time after his arrival; his note is a call to love, and used only by the male, who sits perched generally on some dead tree, or bare bough, and repeats his song, which he loses as soon as the amorous season is over. In a trap, which we placed on a tree frequented by cuckoos, we caught not fewer than five male birds in one season. His note is so uniform, that his name in all languages seems to have been derived from it; and in all other countries it is used in the same reproachful sense.

The plain song *cuckoo* grey,
Whose note full many a man doth mark,
And dares not answer nay.


Shakespeare.

The reproach seems to arise from this bird

making use of the bed or nest of another to deposit its eggs in; leaving the care of its young to a wrong parent; but *Juvenal* with more justice gives the infamy to the bird in whose nest the supposititious eggs were layed,

*Tu tibi tunc curruca places.**

A water-wagtail, a yellow hammer, or hedge-sparrow,† is generally the nurse of the young cuckoos; who, if they happen to be hatched at the same time with the genuine offspring, quickly destroy them, by ejecting them from the nest. This want in the cuckoo of the common attention other birds have to their young, seems to arise from some defect in its make, which disables it from incubation; but what that is, we confess ourselves ignorant, referring the inquiry to some skilful anatomist. A friend tells me that the stomach is uncommonly large, even so as to reach almost to the



This bird has been ridiculously believed to change into a hawk, and to devour its nurse on quitting the nest, whence the *French* proverb *ingrat comme un coucou*. But it is not carnivorous, feeding only on worms and insects: it grows very fat, and is said to be as good eating as a land rail. The *French* and *Italians* eat them to this day. The *Romans* admired them greatly as a food; *Pliny** says, that there is no bird to compare with them for delicacy.

The weight of the cuckoo is a little more *Description* than five ounces; the length is fourteen inches; the breadth twenty-five. The bill black, very strong, a little incurvated, and about two-thirds of an inch long; the irides are yellow. The head, hind part of the neck, the coverts of the wings, and the rump, are of a dove color; darker on the head and paler on the rump. The throat and upper part of the neck are of a pale grey; the breast and belly white, crossed elegantly with undulated lines of black; the vent feathers are of a buff color, marked with a few dusky spots. The wings are very

* *Lib. X. c. 9.*

long, reaching within an inch and a half of the end of the tail; the first quill feather is three inches shorter than the others; all are dusky, and their inner webs are barred with large oval white spots. The tail consists of ten feathers of unequal lengths like those of the butcher bird: the two middle are black tipped with white; the others are marked with white spots on each side their shafts. The legs are short, and the toes disposed two backwards and two forwards like the woodpecker, though it is never observed to run up the sides of trees.

Female. The female differs in some respects; the neck before and behind is of a brownish red; the tail barred with the same color and black, and spotted on each side the shaft with white. [The cuckoo when very young is a black looking ugly animal resembling at first sight a young woodpecker in this state when grown to nearly




At a more advanced period the young birds are brown mixed with ferruginous and black, and in that state have been described by some authors as old ones.

The cuckoo is scarce in *Italy*; it arrives there in *April*, and disappears with the goat-suckers after the dog-days.

[To Dr. *Jenner*, so well known for his discovery of the cow-pock as a substitute for the small-pox, we are indebted for the compleat developement of the manners of this curious bird. On the 18th of *June*, 1787, says this indefatigable enquirer, I examined the nest of a hedge-sparrow which then contained a cuckoo's and three hedge-sparrow's eggs. On inspecting it the day following, the bird had hatched; but the nest then contained only a young cuckoo and one hedge-sparrow. The nest was placed so near the extremity of a hedge, that I could distinctly see what was going forward in it; and to my great astonishment, saw the young cuckoo, though so lately hatched, in the act of turning out the young hedge-sparrow. The mode of accomplishing this was very curious. The little animal, with the assistance of its rump and

wings, contrived to get the bird upon its back; and making a lodgment for its burthen, by elevating its elbows, clambered backward with it up the side of the nest, till it reached the top; where, resting for a moment, it threw off the load with a jerk, and quite disengaged it from the nest. It remained in this situation for a short time, feeling about with the extremities of its wings, as if to be convinced whether the business was properly executed, and then dropped into the nest again. With these, the extremities of its wings, I have often seen it examine as it were an egg and nestling, before it began its operations; and the nice sensibilities which these parts seem to possess, seemed sufficiently to compensate the want of sight, which as yet it was destitute of. I afterwards put in an egg; and this by a similar process was conveyed to the edge of the nest




on almost incessantly till it is effected. The singularity of its shape is well adapted to these purposes: for, different from other newly-hatched birds, its back, from the scapulæ downwards, is very broad, with a considerable depression in the middle. This depression seems formed by nature, for the design of giving a more secure lodgment to the egg of the hedge-sparrow or its young one, when the young cuckoo is employed in removing either of them from the nest. When it is about twelve days old, this cavity is quite filled up, and then the back assumes the shape of nestling birds in general.

It sometimes happens that two cuckoo's eggs are deposited in the same nest, and then the young produced from one of them must inevitably perish. Two cuckoos and one hedge-sparrow were hatched in the same nest, and one hedge-sparrow's egg remained unhatched. In a few hours after, a contest began between the cuckoos for the possession of the nest, which continued undetermined till the next afternoon, when one of them, which was somewhat superior in size, turned out the other, together with the young hedge-sparrow and

the unhatched egg. The combatants alternately appeared to have the advantage, as each carried the other several times nearly to the top of the nest, and then sunk down again, oppressed by the weight of the burthen; till at length, after various efforts, the strongest prevailed, and was afterwards brought up by the hedge-sparrow.

The causes for these singularities, Dr. Jenner supposes to be chiefly the short stay of the bird in this country. The cuckoo's first appearance is about the 17th of *April*, and its egg is not ready for incubation till the middle of *May*. A fortnight is taken up by the sitting bird, in hatching the egg. The young bird generally continues three weeks in the nest before it flies; and the foster-parents feed it more than five weeks after this period: so that if a cuckoo should be ready with an egg much sooner than



GENUS VIII. WRYNECK.

BILL weak, slightly incurvated.

NOSTRILS bare, sunk.

TONGUE, long, slender, armed at the point.

TAIL of ten flexible feathers.

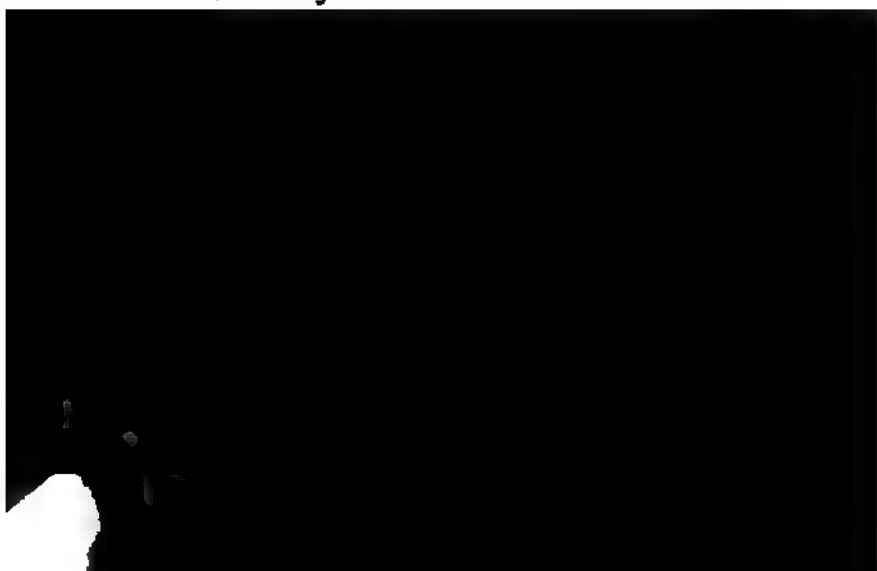
FEET climbing.

- Yunx Torquilla.** *Y. grisea fusco nigricanteque varia, abdomine rufescente—albo maculis nigricantibus, rectricibus maculis striis fasciisque nigris undulatis.* *Lath. ind. orn.* 223. *id. Syn.* ii. 548. *t.* 24. *id. Sup.* i. 103.
- Le Tercou, Torcou, ou Turcot.** *Belon av.* 306.
- Jynx.** *Gesner av.* 573.
- Aldr. av.* i. 421.
- The Wryneck.** *Wil. orn.* 138.
- Raii syn. av.* 44.
- Le Torcol, Torquilla.** *Brisson av.* 4. *Tab.* 1. *fig.* 1.
- fig.* 1. *Hist. d'oïis.* vii. 84. 1. *Wryneck.* *t.* 3. *Pl. Enl.* 698.
- Collotorto, Verticella.** *Zinn.* 72.
- The Emmet Hunter.** *Charlton ex.* 93.
- Jynx Torquilla.** *Gm. Lin.* 423.
- Gjoktya.** *Faun. Suec. sp.* 97.
- Bende-Hals.** *Br.* 37.
- Natterwindl, Wendhallss.** *Kram.* 336.
- Dreh-Hals.** *Frisch.* i. 38.
- Ishudesch.** *Scopoli, No.* 50.
- Br. Zool.** 80. plate F. *Arct. Zool.* i. 313.

NATURE, by the elegance of its penciling *Description.* the colors of this bird, hath made ample amends for their want of splendor. Its plumage is

marked with the plainest kinds. A list of black and ferruginous strokes divides the top of the head and back. The sides of the head and neck are ash colored, beautifully traversed with fine lines of black and reddish brown; the quill feathers are dusky, but each web is marked with rust colored spots. The chin and breast are of a light yellowish brown, adorned with sharp pointed bars of black. The tail consists of ten feathers, broad at their ends and weak; of a pale ash color, powdered with black and red, and marked with four equidistant bars of black. The tongue is long and cylindric, for the same use as that of the woodpecker. The toes are also disposed the same way. The bill is short, weak, and a little arcuate. The irides are of a yellowish hazel.

The Wryneck we believe to be a bird of



The food of this species is insects, but chiefly ants, for on examination we found the stomach of one filled with their remains. As the tongue of this bird, like that of the Ant-bear or *Tamandria*, is of an enormous length; it possibly not only makes use of it to pick those insects out of their retreat, but like that quadruped may lay it across their path, and when covered with ants draw it into its mouth.

Its weight is one ounce and a quarter: the length seven inches; the breadth eleven. It takes its name from a manner it has of turning its head back to the shoulders, especially when terrified; it has also the faculty of erecting the feathers of the head like those of the jay. Its note is like that of the Kestrel, a quick repeated squeak. Its eggs are white, and have so thin a shell that the yolk may be seen through it. It builds in the hollows of trees, making its nest of dry grass, in which we have counted nine young.

342 GREEN WOODPECKER. CLASS II.

GENUS IX. WOODPECKER.

BILL straight, strong, angular.

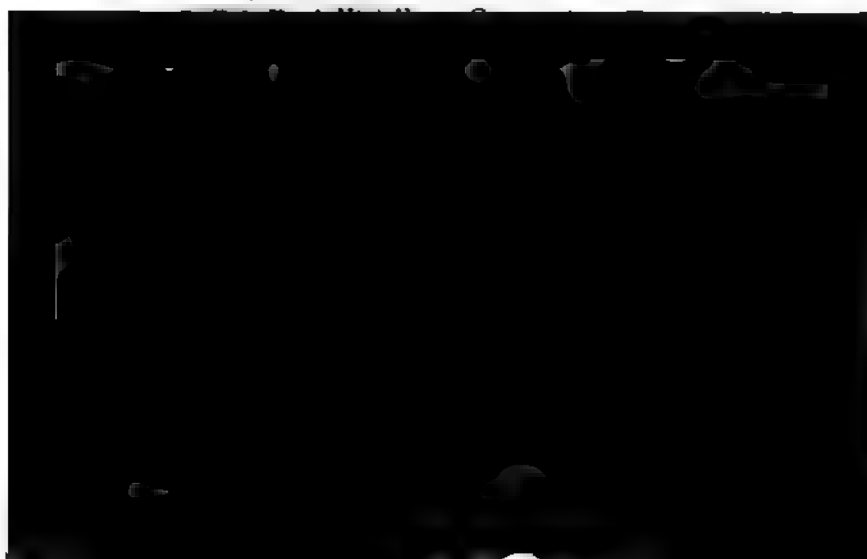
NOSTRILS covered with bristles.

TONGUE very long, slender, and armed at the end with a sharp bony point.

TAIL of ten stiff feathers.

FEET climbing.

- | | |
|--|--------------------------------------|
| 1. <i>Green.</i> <i>Picus viridis.</i> <i>P. viridis, ver-</i> | <i>Hist. d'oïis.</i> vii. 7. t. 1. |
| <i>tice coccineu. Lath. ind.</i> | <i>Pl. Enl.</i> 371. 879. |
| <i>orn.</i> 234. <i>id. Syn.</i> ii. 577. | Wedkvar, Gronspik, |
| <i>id. Sup.</i> i. 110. | Grongjoling. <i>Faun. Suec.</i> |
| Le Pic mart, Pic verd, Pic | <i>sp.</i> 99. |
| jaulne. <i>Belon av.</i> 299. | <i>Hasselquist itin. Ter. Sanct.</i> |
| <i>Gesner av.</i> 710. | 291. |
| <i>Pico verde. Aldr. av.</i> i. 416. | <i>Girald. Cambrens.</i> 191. |
| Green Woodpecker, or | <i>Danish & Norv. Groenspet.</i> |
| Woodspite; called also | <i>Br.</i> 89. |



CLASS II. GREEN WOODPECKER. 343

mals to their respective nature, cannot be better illustrated than from this genus; which we shall give from the observations of our illustrious countryman Mr. *Ray*.*

These birds feed entirely on insects, and their principal action is that of climbing up and down the bodies or boughs of trees; for the first purpose they are provided with a long slender tongue, armed with a sharp bony end barbed on each side, which by the means of a curious apparatus of muscles† they can exert at pleasure, darting it to a great length into the clefts of the bark, transfixing and drawing out the insects that lurk there. They are reckoned great enemies to bees according to *Frisch*.

They make their nests in the hollows of *Nest.* trees: the entrance to which is as exact a circle, as if it had been formed by the assistance of a compass. They will work their way for the space of nearly two feet, and lay their eggs, in the chamber at the extremity on the bare wood. The number of their eggs, which are of a beautiful transparent white, amounts

* *Ray* on the Creation, p. 143.

† *Phil. Trans. Martin's abridg.* V. p. 55. plate 2.

844 GREEN WOODPECKER. CLASS II.

to seven at least, for I have seen so many of their young taken out of a single nest; this was on *June 12, 1794*. They will, before they can fly, appear out of their hollows, and climb up and down the body of the tree. In order, therefore, to force their way to those cavities, their bills are formed strong, very hard, and wedge-like at the end; Dr. *Derham* observes, that a neat ridge runs along the top, as if an artist had designed it for strength and beauty; it has not the power to penetrate a sound tree: their perforation of any tree is a warning to the owner to throw it down.

Their legs are short, but strong; their thighs very muscular; their toes disposed, two backwards, two forward; the feathers of the tail are very stiff, sharp pointed and bending downwards: the three first circumstances ad-



CLASS II. GREEN WOODPECKER. 345

body down, and forces them to fly with short and repeated jerks when they would ascend, or even keep in a line. This species feeds oftener on the ground than any other of the genus.

This kind weighs six ounces and a half: its *Description* length is thirteen inches; the breadth twenty and a half. The bill is dusky, triangular, and nearly two inches long; the crown of the head is crimson, spotted with black. The eyes are surrounded with black, beneath which (in the males only) is a rich crimson mark. The back, neck, and lesser coverts of the wings, are green; the rump of a pale yellow; the greater quill feathers are dusky, spotted on each side with white. The tail consists of ten stiff feathers, whose ends are generally broken as the bird rests on them in climbing; their tips are black; the rest of each is alternately barred with dusky and deep green. The whole under part of the body is of a very pale green; and the thighs and vent marked with dusky lines. The legs and feet are of a cinereous green.

346 GREAT SPOTTED W. CLASS II.

2. *Great Spotted.*

- | | |
|---|--------------------------------------|
| Picus major. <i>P. albo nigro-</i> | <i>av. iv. 34. Hist. d'oïs. vii.</i> |
| <i>que varius, crisso occipite-</i> | <i>57. Pl. Enl. 196. m. 595.</i> |
| <i>que nigra. Lath. ind. orn.</i> | <i>fem.</i> |
| 228. id. Syn. ii. 564. id. | Picus major. Gm. Lin. |
| <i>Sup. i. 107.</i> | <i>436.</i> |
| L'épiche, Cul rouge, Pic | Gyllenrenna. Fann. Succ. |
| rouge. Belon av. 300. | <i>sp. 100.</i> |
| Picus varius, seu albus. Ges- | Hakke-speet, Brunnich, |
| ner av. 709. | <i>40.</i> |
| Greater spotted Woodpeck- | Grosses Baumhackl. Kram. |
| er, or Witwal. Wil. orn. | <i>336.</i> |
| <i>137.</i> | Bunt Specht. Frisch. i. 36. |
| Rati syn. av. 43. | Kobilar. Scopuli, No. 53. |
| Picchio. Zinan. 73. | Br. Zool. 79. plate F. Arct. |
| Le grand Pic varié. Brisson | Zool. i. 319. |

Description. **THIS** species weighs two ounces three quarters: the length is nine inches; the breadth sixteen. The bill is one inch and a quarter long, of a black horn color. The irides are red: the forehead is of a pale buff color: the

CLASS II. GREAT SPOTTED W. 347

vent feathers of a fine light crimson. The back, rump, and coverts of the tail, and lesser coverts of the wings are black; the scapular feathers and coverts adjoining to them are white; the quill feathers black, elegantly marked on each web with round white spots. The four middle feathers of the tail are black, the next tip with dirty yellow; the bottoms of the two outmost black, the upper parts a dirty white; the exterior feather marked on each web with two black spots; the next with two on the inner web, and only one on the other. The legs are of a lead color. The fe- *Female.* male wants that beautiful crimson spot on the head; in other respects the colors of both agree. This species is much more uncommon than the preceding; and keeps altogether in the woods.

All the species continue the whole year in *Italy.*

348 MIDDLE SPOTTED W. CLASS II.

4. *Middle*, *Picus medius*. P. albo nigro- *Gm. Lín.* 436.
 que varius, crisso pilleoque *Faun. Suec. sp.* 82.
 rubris. *Lath. Ind. orn.* *Scopoli, No.* 54.
 229. *id. Syn. ii.* 545. *id.* *Le Pic varié.* *Brisson av.*
Sup. i. 107. *id. Sup. ii.* *iv.* 38. *Pl. Enl.* 611.
 140.

THIS agrees with the preceding in colors and size, excepting that the crown of the head in this is of a rich crimson; the crown of the head in the male of the former is black; and the crimson is in the form of a bar on the hind part.

Birds thus marked have been shot in *Lancashire*, and other parts of *England*; but I am doubtful whether they are varieties, or distinct species.



- | | |
|--|--|
| Picus minor. P. albo nigro-
que varius, vertice rubro,
crisso testaceo. <i>Lath. ind.</i>
<i>orn.</i> 229. <i>id. Syn.</i> ii. 566.
<i>id. Sup.</i> i. 107.
<i>Gesner av.</i> 709.
<i>Aldr. av.</i> i. 416.
Lesser spotted Woodpecker,
or Hlickwall. <i>Wil. orn.</i> 138.
<i>Raii syn. av.</i> 43.
Picus minor. <i>Gm. Lin.</i> 437.
<i>Faun. Suec.</i> 192. | Le petit Pic varié. <i>Brisson</i> 3. <i>Lest</i>
<i>av.</i> iv. 41. <i>Hist. d'oïis.</i> vii. <i>Spotted,</i>
62. <i>Pl. Enl.</i> 598.
<i>Scopoli. No.</i> 55.
<i>Hasselquist. itin.</i> 242.
Kleiner Bunt-Specht. <i>Frisch</i>
i. 37.
Kleiner Baumhackl. <i>Kram.</i>
336.
<i>Br. Zool.</i> 79. plate E. <i>Act.</i>
<i>Zool.</i> i. 326. |
|--|--|

THIS species is the lest of the genus, scarcely *Description,* weighing an ounce; the length is six inches; the breadth eleven. The forehead is of a dirty white; the crown of the head (in the male) of a beautiful crimson; the cheeks and sides of the neck are white, bounded by a bed of black beneath the former. The hind part of the head and neck, and the coverts of the wings are black; the back is barred with black and white; the scapulars and quill feathers spotted with black and white; the four middle feathers of the tail are black; the others varied with black and white; the breast and belly are of a dirty white; the crown of the head (in the

350 HAIRY WOODPECKER. CLASS II.

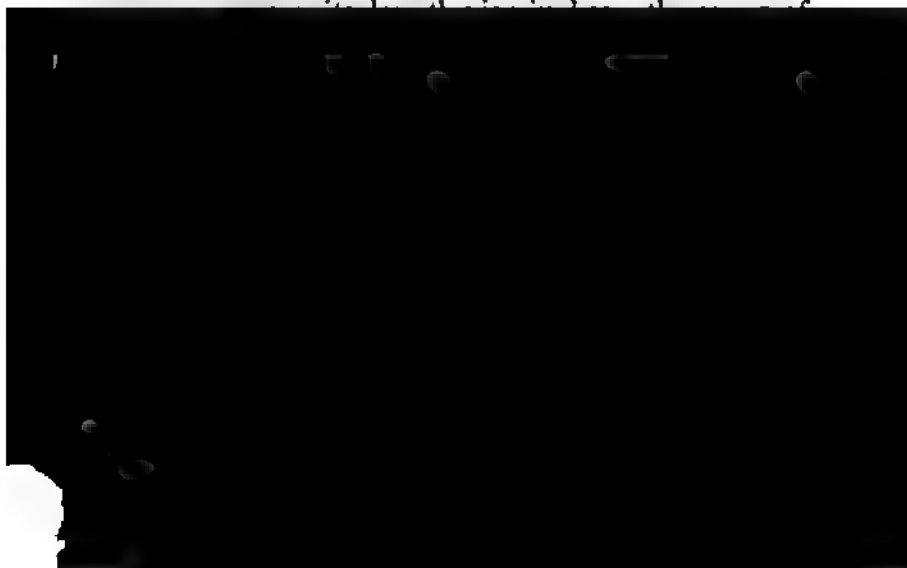
female) is white. The feet are of a lead color.

It has all the characters and actions of the greater kind, but is not so often met with.

4. *Hairy*. [*Picus villosus*. *P. albo nigroque varius*, subtus albus, dorso longitudinaliter subvillosus, rectricibus externis toto albis. *Lath.* *P. villosus*. *Gm. Ltn.* 435. *Pic chevelu de Virginie*. *Brisson av. iv. Hist. d'ois. vii. 74. Pl. Enl.* 754. *ind. orn.* 232. *id. Syn.* ii. *Arct. Zool.* i. 320. 572. *id. Sup.* i. 108.]

THIS species is added to the *British Zoology* by Dr. *Latham*, who states that a pair of these birds were shot near *Halifax*, in *Yorkshire*. They are said not to be uncommon in the north of *England*.

Description. The weight of this species is about two



middle feathers of the tail are black, the two outmost entirely white; the rest black marked crossways with white. The female wants the red spot on the head.

[*Picus martius*. *P. niger pileo* *Hist. d'ois. vii. 41. Tab. 5. Great*
coccineo. Lath. ind. orn. 2. Pl. Enl. 596. Black,
224. id. Syn. ii. 552. id. Raii syn. av. 42. Willugh-
Sup. i. 104. Gm. Lin. 424. by, 92. t. 21.
Le Pic noir. Brisson iv. 21. Arct. Zool. i. 324.

THE length of this woodpecker is eighteen *Description.*
 inches; its extent twenty-nine. The entire
 plumage is of a full black color, except the
 head, which is of a rich crimson. In the fe-
 male, the crimson color is confined to the hind
 part of the head.

This species has been also added to the *British*
Zoology on the authority of Dr. *Latham*, who
 says it has occasionally been seen in *Devon-*
shire, and the southern parts of *England.*]

GENUS X. KINGFISHER.

BILL straight, strong, triangular, sharp pointed.

TONGUE sharp and pointed.

TOES, three lowest joints of the outmost connected to the middle toe.

1. *Common*. *Alcedo Ispida*. *A. brachyura*, *suberistata cœrulea*, 448.
subtus rufa, *loris fulvis*, *Le Martin-pêcheur*. *Bris-*
vertice nigro undulato, *son av. iv. 471. Hist.*
macula aurium gulaque *d'ots.vii.164. Pl. Enl.77.*
alba. *Lath. ind. orn. 252.* *Piombino, Martino pesca-*
torre, Pescatore del re.
id. Syn. ii. 626. id. Sup. Zinan. 116.
- Le Martinet pescheur*. *Belon* *Ispogel. Mus. Fr. ad 16.*
av. 218. *Scopoli. No. 64.*
- Ispida (Ispogel).* *Gesner av. Jis-fugl. Brunnich in Ap.*
571. *pend.*

tionably small; the bill is two inches long; the upper mandible black, the lower yellow: the irides are red. The colors of this bird atone for its inelegant form. The crown of the head, and the coverts of the wings are of a deep blackish green, spotted with bright azure; the scapular feathers, and coverts of the tail are also of a most splendid azure; the whole underside of the body is orange colored; a broad mark of the same passes from the bill beyond the eyes; beyond that is a large white spot. The tail is short, and consists of twelve feathers of a rich deep blue: the feet are of a reddish yellow; the inner toe adheres to the middle toe by one joint.

The kingfisher frequents the banks of rivers, *Manners.* and feeds on fish. To compare small things to great, it takes its prey after the manner of the osprey, balancing itself at a certain distance over the water for a considerable time, then darting below the surface, brings the prey up in its bill. While it remains suspended in the air, in a bright day, the plumage exhibits a beautiful variety of the most dazzling and brilliant colors. This striking attitude did not escape the notice of the ancients, for *Ibycus*,

as quoted by *Athenæus*, styles these birds *ἀλκυονες τανυστιγες*,* the *halcyons with expanded wings*. It makes its nest in holes in the sides of the cliffs, which it scoops to the depth of three feet, and in holes in the banks of rivers, chiefly those which before belonged to the water rat; in these the female lays from five to nine eggs,† of a most beautiful semi-transparent white. The nest is very fetid, by reason of the remains of the fish brought to feed the young.

This species is the *ἀλκυοναφρων*, or *mute halcyon* of *Aristotle*,‡ which he describes with more precision than is usual with that great philosopher. After his description of the bird, follows that of its nest, than which the most inventive of the ancients have delivered nothing that appears at first sight more fabulous and
 * *extravagant*. He relates that it resembled



overset the water could not enter; that it resisted any violence from iron, but could be broke with a blow of the hand; and that it was composed of the bones of the *Βίλονη* or sea-needle.* The nest had medical virtues ascribed to it; and from the bird was called *Halcioneum*. In a fabulous age every odd substance that was flung ashore received that name; a species of tubular coral, a sponge, a zoophyte, and a miscellaneous concrete having by the antients been dignified with that title from their imaginary origin.† Yet much of this seems to be founded on truth. The form of the nest agrees most exactly with the curious account of it that Count *Zinanni* has favored us with.‡ The materials which *Aristotle* says

* 1050. See also *Ælian*. lib. ix. c. 17. *Plin*. lib. x. c. 32.

† *Plin*. lib. xxii. c. 3. *Diosc*. lib. v. c. 91.

‡ Nidifica egli nelle ripe degli acquidotti, o de piccoli torrenti vicino al mare, formando però il nido nei siti più alti di dette ripe, acciocchè l'escrescenza delle acque non possa insinuarsi nel di lui foro; e fa egli detto nido incavando internamente il terreno in tondo per la lunghezza di tre piedi, e riducendo il fine di detto foro a foggia di batello, tutto coperto di scaglie di pesci, che restano vagamente intrecciate; ma forse non sono così disposte ad arte, bensì per accidente.

it was composed of, are not entirely of his own invention. Whoever has seen the nest of the kingfisher, will observe it strewed with the bones and scales of fish; the fragments of the food of the owner and its young; and those who deny that it is a bird which frequents the sea, must not confine their ideas to our northern shores, but reflect, that birds inhabiting a sheltered place in the more rigorous latitudes, may endure exposed ones in a milder clime. *Aristotle* made his observations in the east, and allows, that the *halcyon* sometimes ascended rivers;* possibly to breed, for we learn from *Zinanni*, that in his soft climate, *Italy*, it breeds in *May*, in banks of streams that are near the sea; and having brought up the first hatch, returns to the same place to lay a second time.

On the foundation laid by the philosopher, succeeding writers formed other tales, or



it was therefore necessary to place it in a tranquil sea, and to supply the bird with charms to allay the fury of a turbulent element during the time of its incubation; for it had, at that season, power over the seas and the winds.

Κ' ἀλκυόνες στορισεῦντι τὰ κύματα, την τε θάλασσαν,
 Τόν τε νότον, τον τ' εὐρον, ὃς ἰσχαῖα φυκία κινῇ·
 Ἀλκυόνες, γλαυκαῖς Νηρηίσι ταί τε μάλισα
 Ορεῖθον ἰφίλαθιν. *Theocrit. Idyl. vii. l. 57.*

May *Halcyons* smooth the waves, and calm the seas,
 And the rough south-east sink into a breeze;
Halcyons of all the birds that haunt the main,
 Most lov'd and honor'd by the *Nereid* train.

Fawkes.

These birds were equally favourites with *Thetis* as with the *Nereids*;

Dilectæ Thetidi Halcyones. Virg. Georg. i. 399.

As if to their influence these deities owed a repose in the midst of the storms of winter, and by their means were secured from those winds which disturbed their submarine retreats, and which agitated even the plants at the bottom of the ocean.

Such are the accounts given by the *Roman* and *Sicilian* poets. *Aristotle* and *Pliny* tell us, that this bird is most common in the seas of *Sicily*; that it sat only a few days, and those in

the depth of winter; and during that period the mariner might sail in full security, for which reason they were stiled, *Halcyon days*.*

Perque dies placidos hiberno tempore septem
 Incubat *Halcyone* pendentibus æquore nidis:
 Tum via tuta maris: ventos custodit, et arcet
Æolus egressu. Ovid. Met. lib. XI.

Alcyone compress'd,
 Seven days sits brooding on her watery nest
 A wintry queen; her sire at length is kind,
 Calms every storm, and husbes every wind. *Dryden*.

In after times, these words expressed any season of prosperity: these were the *Halcyon days* of the poets, the brief tranquillity, the *septem placidi dies* of human life.

The poets also made it a bird of song: *Virgil* seems to place it in the same rank with the Linnæa:

Littoraque *Halcyonem* resonant, et *Acanthida* dum.
Georg. III. 338.



But we suspect that these writers have transferred to our species the harmony that belongs to the vocal alcedo of the philosopher, καὶ ἡ μὲν φθίγγεται, καθίζανουσα ἐπὶ τῶν δονάκων,* which was vocal, and perched upon reeds. Aristotle says, it is the lest of the two, but that both of them have a cyanean back.† Belon labors to prove the vocal alcedo to be the rousserole, or the greater reed sparrow,‡ a bird found in France and some other parts of Europe, and of a very fine note; it is true that it is conversant among reeds, like the bird described by Aristotle, but as its colors are very plain, and that striking character of the fine blue back is wanting, we cannot assent to the opinion of Belon, and rather imagine it to be one of the lost birds of the antients.

Those who think we have said too much on this subject, should consider how incumbent it is on every lover of science, to attempt placing the labors of the antients in a just light; to


* *Hist. an.* 892.

† Νῶτον κυανόν, the color of the *cyanus*, or *lapis lazuli*.

‡ Le Rousserolle, *Belon av.* 221. Le Roncherolle, *Brisson av.* ii. 218. Greater reed sparrow, *Wil. orn.* 143. *Turdus arundinaceus*, *Lin. syst. sp.* 226. Reed Thrush. *Lath. Syn.* iii. 32.

clear their works from those errors, which owe their origin to the darkness of the times; and to evince, that many of their accounts are strictly true; many founded on truth; and that others contain a mixture of fable and reality, which certainly merit the trouble of separation. It is much to be lamented that travellers, either on classic or any other ground, have not been more assiduous in noting the zoology of those countries, which the antients have celebrated for their productions: for, from those who have attended to that branch of natural knowledge, we have been able to develope the meaning of the old naturalists, and settle with precision some few of the animals of the antients.

Italy, a country crowded with travellers of all nations, hath not furnished a single writer on classical zoology. The *East* has been more



Hasselquist has made some additions to the ornithology of *Egypt*: but all these fall short of the merits of that most learned and inquisitive traveller, *Dr. Shaw*; who with unparalleled learning and ingenuity, has left behind him the most satisfactory, and the most beautiful comments on the animals of the antients, particularly those mentioned in HOLY WRIT, or which relate to the *Ægyptian* mythology: such as do honor to our country, and we flatter ourselves will prove incentives to other travellers, to complete what must prove superior to any one genius, be it ever so great: from such we may be supplied with the means of illustrating the works of the antient naturalists; whilst commentators, after loading whole pages with unenlightening learning, leave us as much in the dark, as the age their authors wrote in.

The Kingfisher never quits *Italy*.

[The Kingfisher seldom flies much or far from its haunt, and only passes just above the surface of the water in an easy gliding swift flight either up or down the stream, except when it crosses a meadow to a branch of the river it frequents. It usually alights on the

straight, about three quarters of an inch long; the upper mandible black, the lower white; the irides hazel; the crown of the head, back, and coverts of the wings are of a fine bluish grey; a black stroke passes over the eye from the mouth: the cheeks and chin are white; the breast and belly of a dull orange color; the quill feathers dusky: the wings underneath are marked with two spots, one white at the root of the exterior quills, the other black at the joint of the bastard wing. The tail consists of twelve feathers; the two middle are grey; the two exterior feathers tipped with grey, then succeeds a transverse white spot; beneath that the rest is black. The legs are of a pale yellow; the back toe very strong, and the claws large.

Manners. This bird runs up and down the bodies of



breeds in the hollows of trees, [and lays six or seven eggs, of a dull white color, blotched with rufous or sanguineous;] if the entrance to its nest be too large, it stops up part of it with clay, leaving only room enough for admission: in autumn it begins to make a chattering noise, being silent for the greatest part of the year. *Doctor Plot* tells us, that this bird, by putting its bill into a crack in the bough of a tree, can make such a violent sound as if it was rending it asunder, so that the noise may be heard at least twelve score yards.

The Nuthatch migrates in *Italy*; a few only remain there during the winter.

GENUS XII. BEE EATER.

BILL quadrangular, a little incurvated, sharp-pointed.

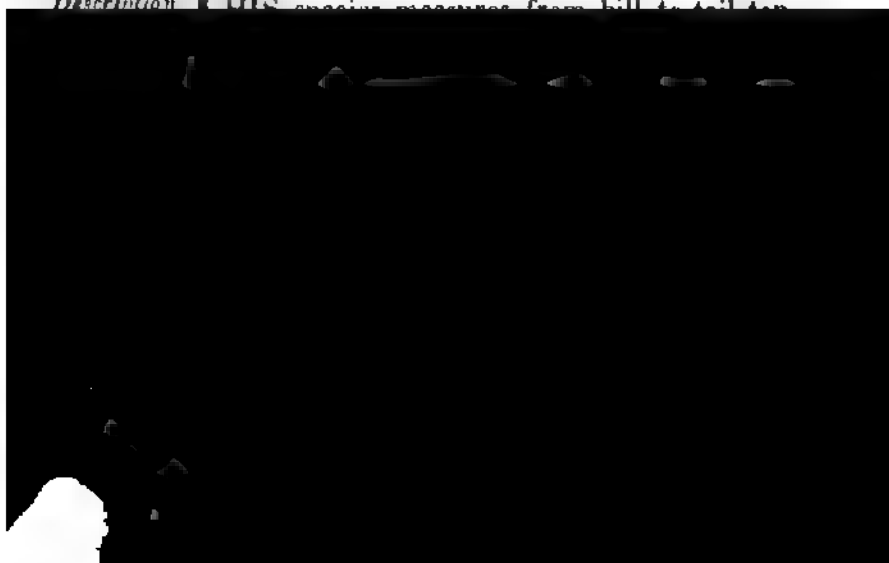
NOSTRILS small, placed near the base.

TONGUE slender.

TOES, three forward, one backward; the three lower joints of the middle toe closely joined to those of the outmost.

Common. *Merops apiaster.* *M. dorso* The Bee eater. *Wil. orn.*
ferrugineo abdomine cau- 147.
daque viridi-cærulescente, *Raii syn. av.* 49.
rectricibus duobus longi- *Lin. Tr. iii.* 333.
oribus, gula lutea. *Lath.* *Le Guepier. Brisson av. iv.*
ind. orn. 289. *id. Syn. ii.* 532. *Hist. d'oiz. vi.* 480.
667. id. Sup. 119. Gm. *Pl. Enl.* 938.
Lin. 460.

Description. **T** *THIS species measures from bill to tail ten*

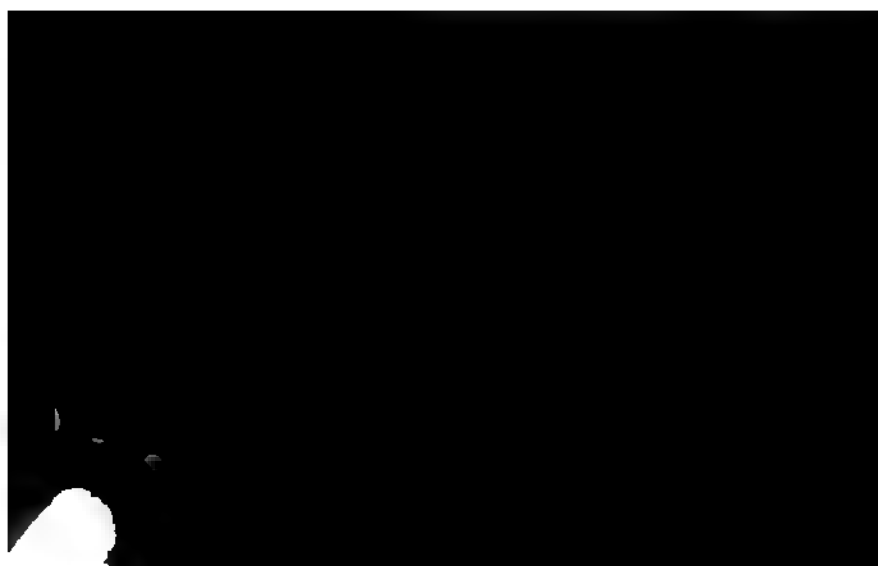


which passes through the eyes: the back and scapulars are of a very pale yellow, tinged with chestnut and green; the rump and upper tail coverts blue-green with a yellowish tinge; the throat yellow; the under parts of the body blue-green, growing paler towards the belly: the lesser wing-coverts dull green, the middle rufous, and the greater rufous green; the quills for the most part sea-green without, many of the inner rufous; the first short, the second the longest: the tail consists of twelve feathers, the shafts of which are brown above and whitish beneath; the two middle feathers are sea-green with a shade of rufous, the rest the same, but margined with cinereous within; the two middle feathers exceed the outer by three quarters of an inch: the tail is of a wedge-shaped form: the legs are reddish brown; the claws reddish black.*

These beautiful birds chiefly inhabit the southern parts of *Europe*, but occasionally visit *Germany*, *Lorraine*, and other northern districts. They were first observed to visit *England* in 1794, when a flock of about twenty

* *Latham Syn.* ii. 667, to whom we owe this accurate description.

passed most part of the summer in *Norfolk*; but other specimens, since that time, have been killed in *Suffolk*. They are most abundant in the southern parts of *Russia*, particularly about the rivers *Don* and *Volga*, in the banks of which they build their nests, perforating holes to the depth of half a foot for that purpose, and in such numbers, that the clayey banks appear like a honeycomb. The nest is composed of moss, in which they deposit six or seven eggs, perfectly white, and about the size of those of a stare. At the approach of winter they migrate to more southern latitudes. ED.



GENUS XIII. HOPOE.

BILL slender incurvated.

TONGUE very short, triangular, entire.

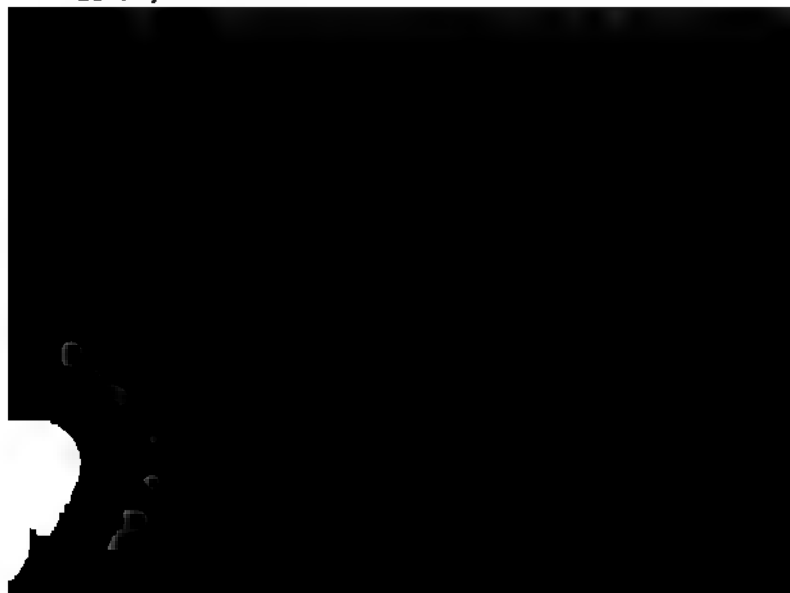
TORS divided to their origin.

TAIL of ten feathers.

- | | |
|--|--|
| Upupa Epops. U. nigricante
et rufo-albo variegata, sub-
tus rufescens, crista rufes-
cente apice nigra, cauda
nigra fascia alba. <i>Lath.</i>
<i>ind. orn.</i> 277. <i>id. Syn.</i> ii.
687. <i>id. Sup.</i> i. 122. | La Hupe ou Puput. <i>Brisson Common.</i>
<i>av.</i> iii. 455. <i>Tab.</i> 43. <i>Hist.</i>
<i>d'ois.</i> vi. 439. <i>Pl. Enl.</i>
52. |
| La Huppe. <i>Belon av.</i> 293. | Upupa Epops. <i>Gm. Lin.</i>
466. |
| Upupa. <i>Gesner av.</i> 776. | Harfogel, Pop. <i>Faun. Suec.</i>
<i>sp.</i> 105. |
| <i>Aldr. av.</i> ii. 314. | Ter Chaous. <i>Pococke Trav.</i>
i. 209. |
| Bubbola. <i>Olini</i> , 36. | Her-fugl. <i>Brunnich</i> , 43. |
| The Hoop, or Hoopoe. <i>Wil.</i>
<i>orn.</i> 145. | Widhopf. <i>Kram.</i> 337. |
| <i>Raii syn. av.</i> 48. | Upupa; arquata stercoraria;
gallus lutosus. <i>Klein.</i>
<i>Stem. av.</i> 24. <i>Tab.</i> 25. |
| The Dung Bird. <i>Charlton</i>
<i>ex.</i> 98. <i>Tab.</i> 99. | Smerda kaura. <i>Scopoli</i> ,
<i>No.</i> 62. |
| <i>Plott's Oxf.</i> 177. | <i>Br. Zool.</i> 83. plate L. <i>Arct.</i>
<i>Zool.</i> i. 332. |
| <i>Edw.</i> 345. | |

THIS bird may be readily distinguished *Description.*
from all others that visit these islands by its

beautiful crest, which it can erect or depress at pleasure. It weighs three ounces: its length is twelve inches; its breadth nineteen. The bill is black, two inches and a half long, slender, and incurvated; the tongue triangular, small, and placed low in the mouth; the irides are hazel; the crest consists of a double row of feathers, the highest about two inches long; the tips are black, their lower part of a pale orange color. The neck is of a pale reddish brown; the breast and belly white; but in young birds marked with narrow dusky lines pointing downwards; the lesser coverts of the wings are of a light brown; the back, scapulars and wings crossed with broad bars of white and black; the rump is white. The tail consists of only ten feathers, white marked with black, in form of a crescent, the horns pointing



which it picks out of ordure of all kinds. The antients believed that it made its nest of human excrement; so far is certain, that its hole is excessively fœtid from the tainted food it brings to its young. The country people in *Sweden* look on the appearance of this bird as a presage of war;

—————Facies armata videtur:

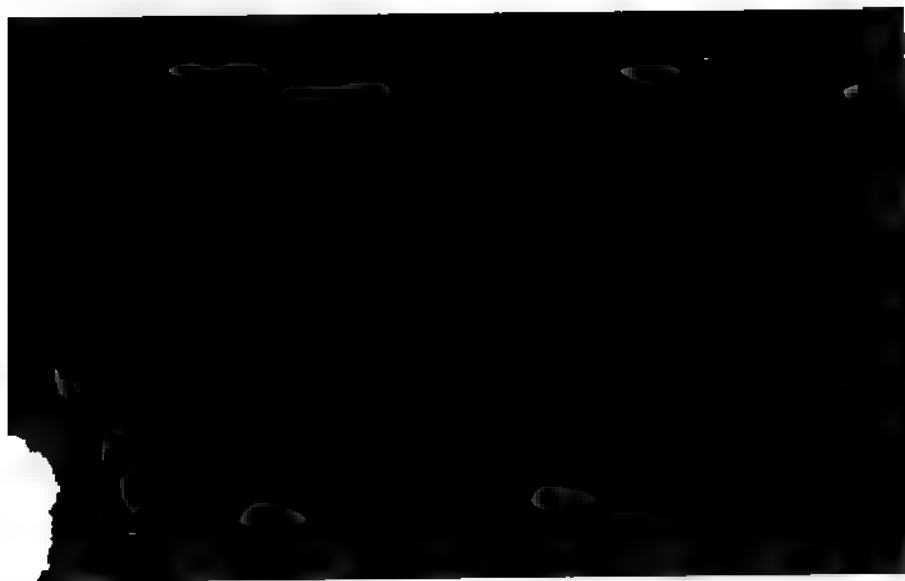
and formerly the vulgar in our country esteemed it a forerunner of some calamity. It visits these islands frequently; but not at stated seasons, neither does it breed with us. It is found in many parts of *Europe*, in *Egypt*, and even as remote as *Ceylon*. The *Turks* call it *Tir Chaous* or the messenger bird, from the resemblance its crest has to the plumes worn by the *Chaous* or *Turkish* couriers.

Ovid says that *Tereus* was changed into this bird:

Vertitur in volucrem, cui stant in vertice cristæ,
Prominet immodicum pro longa cuspidè rostrum:
Nomen *Epops* volucris. *Metam.* lib. vi. l. 672.

Tereus, through grief, and haste to be revenged,
Shares the like fate and to a bird is changed.
Fixed on his head the crested plumes appear;
Long is his beak, and sharpened as a spear. *Croxall.*

The Hoopoe visits *Italy* in *May* and retires
in *September*.



GENUS XIV. CREEPER.

BILL very slender, very much incurvated.


TAIL of twelve feathers.

TOES divided to the origin.

- | | |
|--|---|
| <i>Certhia familiaris</i> . C. grisea, | Le Grimpereau. <i>Brisson</i> 1. <i>Familiar.</i> |
| subtus alba, remigibus fus- | iii. 603. <i>Hist. d'ois.</i> v. |
| cis decem macula alba. | 481. <i>Pl. Enl.</i> 681. 1. |
| <i>Lath. ind. orn.</i> 280. <i>id.</i> | <i>Cat. Carol.</i> app. 37. |
| <i>Syn.</i> ii. 701. <i>id. Sup.</i> i. 126. | <i>Certhia familiaris</i> . <i>Gm Lin.</i> |
| Le petit Grimpereau. <i>Belon</i> | 469. |
| <i>av.</i> 375. | <i>Kyppare. Faun. Succ.</i> sp. 106. |
| <i>Certhia</i> . <i>Geener av.</i> 251. | <i>Træ. Pikke v. Lie-Hesten.</i> |
| <i>Aldr. av.</i> i. 424. | <i>Br.</i> p. 12. <i>Scopoli.</i> No. |
| <i>Wil. orn.</i> 144. | 59. |
| <i>Rail syn. av.</i> 47. | <i>Grau-Specht. Fritsch.</i> i. 29. |
| The Oxeye Creeper. <i>Charl.</i> | <i>Baumlaufferl. Krum.</i> 337. |
| <i>ton ex.</i> 93. | <i>Br. Zool.</i> 82, plate K. <i>Act.</i> |
| <i>Picchio piccolo. Zinn.</i> 75. | <i>Zool.</i> i. 334. |

THE creeper weighs only five drams; and *Description.* next to the Crested wren is the lest of the *Rri-tish* birds; the manner it has of ruffling its feathers, and their length, give it a much larger appearance than is real. The length of this bird is five inches and a half; the b seven and a half. The bill is hooke

sickle; the irides are hazel; the legs slender; the toes and claws very long, to enable it to creep up and down the bodies of trees in search of insects, which are its food. It breeds in hollow trees, and is said to lay sometimes twenty eggs, but they are rarely more than eight in number, of a white color minutely dotted with bright ferruginous, and the shell rather hard. The nest loosely made of dry grass, lined with small feathers, is placed in the hollow of decayed trees. The head and upper part of the neck are brown, streaked with black; the rump is tawny; the coverts of the wings are variegated with brown and black; the quill feathers dusky, tipped with white, and edged and barred with tawny marks; the breast and belly are of a silvery white. The tail is very long, and consists of twelve stiff feathers, with tawny tips. Mr. Hutton and



SECT. III. GALLINACEOUS.

GENUS XV. GROUS.

BILL short arched.

TOES outmost and inner connected to the first joint of the middle toe by a small membrane.

• **With legs feathered to the feet: broad scarlet eye-brows.**

Tetrao Urogallus. *T. fuscus*, capite colloque cinereis, gula abdomineque nigris, axillis albis. *Lath. ind. orn.* 534. *id. Syn.* iv. 729.

Le Coc de bois ou Faisan bruyant. *Belon av.* 249.

Urogallus major (the Male). *Gesner av.* 490.

Grygallus major (the Female). 495.

Gallo cedrone, Urogallus si-
ve Tetrao. *Aldr. av.* ii. 29.

Gallo alpestre, l'etrax Neme-
siani (fem.) Aldr. av. ii. 33.

Raii syn. av. 53.

Cock of the Mountain, or
Wood. *Wil. orn.* 172.

Capricalca. *Sib. Scot.* 16.
Tub. 14, 18.

Le grand coq de Bruyerea.
Brisson av. i. 182. *Hist.*
d'ois. ii. 191. *Pl. Enl.*
73, 74.

Tetrao Urogallus. *Gm. Lin.*
746.

Kjader. *Faun. Suec. sp.*
200.

Pontop. ii. 101.

Tjader-hona. *Hasselquist*
itin. † 571.

1. **Wood.**

† *Swedish edition.* This bird was shot in the isle of

- Pavo sylvestris*. *Girald. To.* *Klein. Stem. Tab.* 27.
pogr. Hibern. 706. *Auerhahn. Frisch.* i. 107,
Mas Norvegis Tiur, Teer, 108.
Toedder. Foemina Norv. *Dei peteln. Scopoli, No.* 169.
Roey. Brunnich, 194. *Br. Zool.* 84. plates M. M*.
Aurhan. Kram. 356. *Arct. Zool.* i. 364.

THIS species is found in no other part of *Great Britain* than the *Highlands of Scotland*, north of *Inverness*, and is very rare even in those parts. It is there known by the name of *Capercalze*, *Auer-calze*, and in the old law books *Caperkally*; the last signifying the horse of the woods; this species being, in comparison of others of the genus, pre-eminently large.†

Giraldus Cambrensis‡ describes it under the title of *Peacock of the wood*, from the rich green that shines on the breast of the male. *Boethius*§ also mentions it under the name of *Capercalze* and truly describes its food, the

cock, but gives it the name of the Cock of the wood, an appellation now confined to this species. Bishop *Lessly** is a third of our historians who makes mention of this bird along with two others of the genus, the black cock and common grouse; but the Ptarmigan is overlooked by them. None of these writers were conversant in the study of natural history, therefore are very excusable for their inaccuracy.

It inhabits wooded and mountainous countries: in particular, forests of pines, birch trees and junipers, feeding on the tops of the former, and berries of the latter; the first often infects the flesh with such a taste, as to render it scarcely eatable. In the spring it calls the females to its haunts with a loud and shrill voice; and is at that time so very inattentive to its safety, as to be very easily shot. It stands perched on a tree, and descends to the females on their first appearance. The female lays from eight to sixteen eggs; eight at the first, and more as they advance in age.†

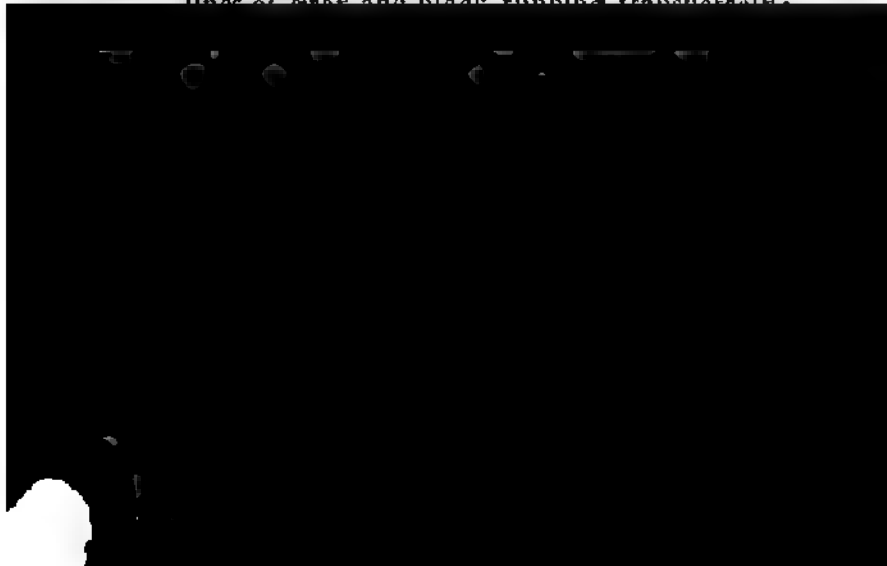
These birds are common to *Scandinavia*, *Ger-*

* *Scotiæ Descr.* 24.

† *Schwenckfelt Aviarium Silesiæ.* 372.

many, *France*, and several parts of the *Alps*. In our country I have seen one specimen, a male, killed in the woods of Mr. *Chisolme*, to the north of *Inverness*. About the year 1760, a few were to be found about *Thomus-town*, in the county of *Tipperary*, but I suspect that the breed is now extinct in every part of *Ireland*. All the *British* grouse and partridge are found in *Italy*, except the Red Grouse.

Description The length of the male is two feet eight inches; the breadth three feet ten inches: its weight sometimes fourteen pounds. The female is much less, the length being only twenty-six inches; the breadth forty. The sexes differ also greatly in color. The bill of the male is of a pale yellow; the nostrils are covered with dusky feathers; the head, neck and back, are elegantly marked, with slender lines of grey and black running transversely



lines of black and reddish brown; the exterior webs of the greater quill feathers are black; at the setting on of the wings in both sexes is a white spot; the inner coverts are of the same color. The tail consists of eighteen feathers, the middle of which is the longest; these are black, marked on each side with a few white spots; the vent feathers black mixed with white. The legs very strong, covered with brown feathers: the edges of the toes pectinated.

The female differs greatly from the male. *Female.* The bill is dusky; the throat red; the head, neck and back, are marked with transverse bars of red and black; the breast has some white spots on it, and the lower part is of a plain orange color; the belly barred with pale orange and black; the tips of the feathers white. The feathers of the back and scapulars black, the edges mottled with black and pale reddish brown; the scapulars tipt with white; the inner webs of the quill feathers dusky; the exterior mottled with dusky and pale brown. The tail is of a deep rust color barred with black, tipt with white, and consists of sixteen feathers.

Gesner, as Mr *Willughby** has long since observed, deceived by the very different plumage of the male and female of this kind, has formed of them two species.

2. *Black. Tetrao Tetrix.* T. nigro-vi- *Tetrao tetrix. Gm. Ltn.* 784.
olacea, cauda bifurca, re- *Orre. Faun. Suec. sp.* 102.
migibus secundariis versus *Le Coq-de-bruyeres a queue*
basin albis. *Lath. ind. orn.* fourchue. *Brisson av.* i.
635. *id. Syn. iv.* 733. *id.* 186. *Hist. d'oie. ii.* 210.
Sup. i. 213. *Pl. Enl.* 172, 173.
Urogallus minor (the Male). *Cimbris mas Urhane, sami-*
Gesner av. 423. *Grygallus na Urhoene. Norvegis*
minor (the Female). 496. *Orrfugl. Brunnich,* 196.
Fasan negro, Fasiano alpes- *Berkhan, Schildhan. Kram.*
tre, Urogallus sive Tetrao 160.
minor Gullus Scoticus syl- *Birckhahn. Frisch.* i. 109.
vestris. Aldr. av. ii. 32. 160. *Gallo sforcello Italis. Sco-*
Rat syn. av. 53. *poli, No.* 169.
Heath-cock, black Game, *Br. Zool.* 85. *Tab. M.* 1. 2.
or Grouse. Wil. orn. 173. *Art. Zool.* i. 367.

ceding species perching like the pheasant: in the summer they frequently descend from the hills to feed on corn; they never pair, but in the spring the male gets upon some eminence, crows and claps his wings;* on which signal all the females within hearing resort to him. The young males quit their mother in the beginning of winter, and keep in flocks of seven or eight till spring; during that time they inhabit the woods. They are very quarrelsome, and will fight together like game cocks; and at that time are so inattentive to their own safety, that it has often happened that two or three have been killed at one shot.

Black grouse are found in various parts of *Great Britain*, in *Scotland*, the *Hebrides*, and also in *Wales*. Some have been shot in *Ireland*, in the county of *Sligo*, where the breed was formerly introduced out of *Scotland*, but I believe that at present the species is extirpated. They are met with even far south, and *Hutchins*, in the introduction to his history of *Dor-*

* The ruffed heathcock of *America*, a bird of this genus, does the same. *Edw. Gl.* p. 80. The cock of the wood agrees too in this exultation during the amorous season; at which time the peasants in the *Alps*, directed by the sound, have an opportunity of killing them.

setshire, says that a few are found in that county. I think they extend to the moors of *Devonshire*, the *New Forest* in *Hampshire*, *Ashdown Forest* in *Sussex*, on the north-west to *Cank heath* in *Staffordshire*, and to some of the *Shropshire* moors, but in most places they are considerably reduced in numbers by the unrestrained havoc made among them.

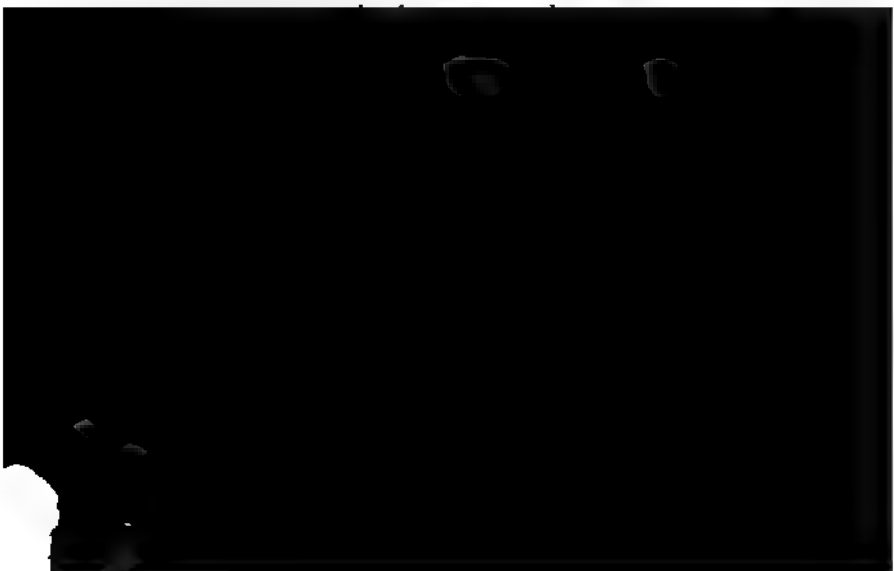
Description. An old black cock weighs from four pounds to four pounds and an half; its length is one foot ten inches; its breadth two feet nine. The bill is dusky; the plumage of the whole body black, glossed over the neck and rump with a shining blue; the coverts of the wings are of a dusky brown; the four first quill feathers are black, the next white at the bottom; the lower half of the secondary feathers white, and the tips are of the same color; the inner coverts of the wings white; the thighs and legs are covered with dark brown feathers; on the former are some white spots; the toes resemble those of the former species. The tail consists of sixteen black feathers, and is much forked; the exterior feathers bend greatly outwards, and their ends seem as if cut off; the feathers

under the tail and inner coverts of the wings are of a pure white.

The female weighs only two pounds: its *Female*. length is one foot six inches; its breadth two feet six. The head and neck are marked with alternate bars of dull red and black; the breast with dusky, black and white, but the last predominates. The back, coverts of the wings and tail, are of the same colors as the neck, but the red is deeper; the inner webs of the quill feathers are mottled with black and white; the inner coverts of the wings are white, and in both sexes form a white spot on the shoulder. The tail is slightly forked; it consists of eighteen feathers variegated with red and black; the feathers under the tail are white, marked with a few bars of black and orange. This bird hatches its young late in summer; it lays from six to eight eggs, of a dull yellowish white color, marked with numbers of very small ferruginous specks, and towards the smaller end with some blotches of the same hue.

Besides the common species of black cock, *Mixed Breed*. *M. Brisson* mentions a variety found in *Scotland*, under the name of *le coq de bruyere piqueté*, or spotted black cock. It differs from

the common sort in being spotted on the neck, breast, wings and thighs with red. This I suppose to have been a spurious breed between this and the former species, as the *Tetrao Hybridus** of *Linnaeus* is. I could not learn that this mixed race was found at present in *North Britain*, perhaps because the cock of the wood is now become so very rare. It is also found in *Sweden*, and described by *Linnaeus* in his *Faun. Succ. sp.* 201. by the title of *Tetrao caudâ bifurcâ subtus albo punctata*, in *Swedish*, *Rackelhane* or *Roflare*. The legs of this and the preceding kind are feathered only to the feet; they both inhabit woods in the winter; therefore nature hath not given them the same kind protection against the cold, as she has the grouse and ptarmigan, who must undergo all the rigor of the season beneath the



- Tetrao Scoticus.** T. rufo et nigricante transversim striatus, rectricibus sex utrinque, exterioribus nigricantibus. *Lath. ind. orn.* 641. *id. Syn.* iv. 746. *id. Sup.* i. 216.
- Tetrao Lagopus.** γ et δ. *Gm. Lin.* 750.
- Gallina campestris.** *Girald. topogr. Hibern.* 706.
- Red Game, Gorcock, or Moor-cock.** *Wil orn.* 177.
- Lagopus altera Plinii.** *Rati 3. Red syn. av.* 54.
- Moor-cock, or Moor-fowl.** *Sib. Scot.* 16.
- Attagen.** *Brisson av.* i. 209. *Hist. d'oïs.* ii. 252.
- La Gelinote d'Ecosse, Bonasa Scotica.** *Brisson av.* 199. *Tab. 22. f. 1. Hist. d'oïs.* ii. 242.
- Br. Zool.* 85. plate M. 3.

THE male weighs about nineteen ounces;* *Description* the length is fifteen inches and a half; the breadth twenty-six. The bill is black; the nostrils covered with red and black feathers; the irides hazel colored; at the base of the lower mandible, on each side, is a white spot; the throat is red. The plumage on the head and neck is of a light tawny red; each feather is marked with several transverse bars of black. The back and scapular feathers are of a deeper red, and on the middle of each fea-

* I have since heard of one shot in *Yorkshire* which weighed twenty-nine ounces.

ther is a large black spot; the breast and belly are of a dull purplish brown, crossed with numerous narrow dusky lines; the quill feathers are dusky. The tail consists of sixteen feathers of an equal length, all of them (except the four middlemost) are black, and the middle feathers are barred with red; the thighs are of a pale red, barred obscurely with black; the legs and feet cloathed to the very claws with thick soft white feathers;* the claws are whitish, very broad and strong.

Female. The female weighs only fifteen ounces. The colors in general are duller than those of the male; the breast and belly are spotted with white, and the tips of some of the coverts of the wings are of the same color. The red naked part that lies above the eyes is less prominent than in the male, and the edges not so deeply fringed.

We believe this species to be peculiar to *England, Scotland, and Ireland*; not having met with any account of it, except in the

* The feet in the figure given by *M. Brisson* are engraved naked, or bare of feathers. The specimen probably came to that gentleman in that condition: his description in other respects is very accurate.

writings of our countrymen Mr. Ray and Willughby, and M. Brisson under the name of *Bonasa Scotica*; the same writer describes it again by the title of *Attugen*, but his references are either to authors who have copied our naturalists, or to such who mean quite another kind. Mr. Ray seems to think his bird, the other *Lagopus* of Pliny,* or the *Francolino* of the modern *Italians*: but the account left us by Pliny seems too brief and uncertain to determine at this time what species he intended; and that the *Francolino* is not the same with our grouse, is evident from the figure of it exhibited by our accurate friend Mr. Edwards.†

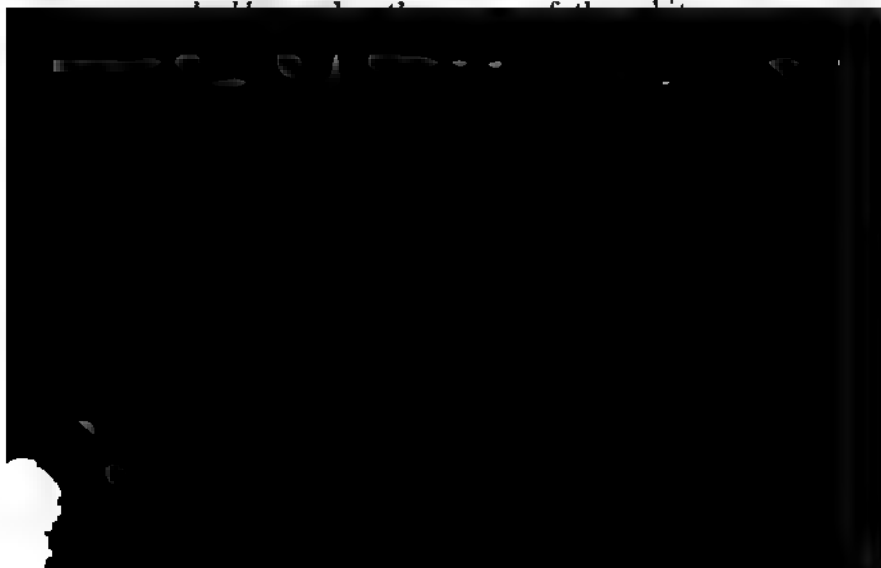
These birds pair in the spring, and lay from six to ten eggs: the young brood or packs follow the hen the whole summer; in the winter they join in flocks of forty or fifty, and become remarkably shy and wild: they always keep on the tops of the hills, are scarcely ever found on the sides, and never descend into the vallies; their food is the mountain berries, and the tops of heath.

* Est et alia nomine eodem, a coturnicibus magnitudine tantum differens, croceo tinctu, cibis gratissima. Lib. x. c. 48.

† Plate 246.

4. *Ptarmi.* Tetrao Lagopus. T. cinereo
gam. alboque varius, pedibus
lanatis, remigibus albis,
rectricibus nigris apice
albis, intermediis albis.
Lath. ind. orn. 639. *id.*
Syn. iv. 741. *id. Sup.* i.
216.
La perdrix blanche. *Belon*
av. 259.
Lagopus. *Gesner av.* 576.
Perdrix alba seu Lagopus,
Perdrix alpestre. *Aldr.*
av. ii. 66.
Lagopus. *Plinii lib.* x. c.
Tetrao Lagopus. *Gm. Lin.*
749.
Snoripa. *Faun. Suec. sp.*
201.
La Gelinote blanche. *Bris-*
son av. i. 216. *Hist. d'oies.*
ii. 261. *Pl. Ent.* 129.
Ruit syn. av. 55.
White Game, erroneously
called the white Par-
tridge. *Will. orn.* 176.
The Ptarmigan. *Sib. Scot.*
16.
Norv. Rype. Mas Islandis,
Riupkarre, Faun. Riapa.
Brunnich 199.
Schneehuhn. *Frisch.* i. 110.
Schneehun. *Kram.* 356.
Scopoli. No. 118.
Br. Zool. 86. plates M. 4, 5.
Arct. Zool. i. 368.

Description THIS bird is well described by Mr. Wil-



being above twice the size of the *Ptarmigan*; and the color of its summer plumage quite different; that of Mr. Edwards' bird being marked with large spots of white, and dull orange; that of the *Ptarmigan* is of a pale *Description.* brown or ash-color, elegantly crossed or mottled with small dusky spots, and minute bars; the head and neck with broad bars of black, rust-color, and white: the wings are white, but the shafts of the greater quill-feathers black; the belly white. In the male, the grey color predominates, except on the head and neck where there is a great mixture of red, with bars of white; but the whole plumage in this sex is extremely elegant. The females and young birds have a great deal of rust-color in them: both agree in their winter dress, being entirely white, except as follows: in the male a black line occurs between the bill and the eyes; the shafts of the seven first quill-feathers are black; the tail of the *Ptarmigan* consists of sixteen feathers, the two middle of which are ash-colored, mottled with black, and tipped with white; the two next black slightly marked with white at their ends, the rest wholly black: the feathers incumbent on the tail white, and

almost entirely cover it. The length of these birds is near fifteen inches; the extent twenty-three; the weight nineteen ounces.

Ptarmigans are found in these kingdoms only on the summits of the highest hills of the Highlands of Scotland and of the Hebrides; and a few still inhabit the lofty hills near Keswick in Cumberland. They live amidst the rocks perching on the grey stones, the general color of the strata in those exalted situations: they are very silly birds, so tame as to bear driving like poultry; and if provoked to rise take very short flights, in a small circuit like pigeons: they taste so like a grouse as to be scarcely distinguished; and like them keep in small packs; they never take shelter in the heath, but beneath loose stones.

These birds are called by *Pliny*, *Lagopi*, their feet being clothed with feathers to the claws, as the hare's are with fur: the nails are long, broad and hollow: the first circumstance guards them from the rigor of the winter; the latter enables them to form a lodge under the snow, where they lie in heaps to protect themselves from the cold: the feet of the red grouse are clothed in the same manner, but those of

the two first species here described, which perch upon trees, are naked, not being in want of such a protection; the legs only are feathered.

In *Scotland* they inhabit from the hill of *Benlomond* to the naked mountains of *Scaroben* in *Cathness*, the isle of *Arran*, many of the *Hebrides*, the *Orknies*, and *Shetland* isles. Notwithstanding some of the *Hebrides* are at no great distance from *Ireland*, none are found in that kingdom.

•• With naked legs.

5. *Common Partridge.* *Perdix. Cineres.* *P. calcavata*, cinereo rufo et nigro varia, macula nuda cocci-
nea sub oculis, cauda fer-
ruginea pectore brunneo.
Lath. ind. orn. 645. *id. Syn.* iv. 762.
La Perdrix grise ou Gonache.
Belon av. 257.
Perdix (Waldhun). *Gesner av.* 669.
Perdix minor sive cinerea.
Aldr. av. v. 66.
Wil. orn. 166.
Rall syn. av. 57.
Tetrao Perdrix. Gm. Lin. 757.
Rapphona. Fann. Suec. sp. 205.
La Perdrix grise. Brisson av. i. 219. *Hist. d'oï.* ii. 401. *Pl. Enl.* 27.
Starna. Zinac. 30.
Agerhoene. Br. 201.
Rebhun. Kram. 357.
Rebhuhn. Frisch. i. 114.
Serebitza. Scopoli, No. 175.
Br. Zool. 86. plate M. *Arct. Zool.* i. 373.

Description **T**HE male partridge weighs near fifteen ounces; the female about two ounces less: the



undulated lines of ash color and black; and in the hind part of the neck is a strong mixture of rust color: on the breast of the male is a broad mark in form of a horse-shoe, of a deep orange hue: in the female it is less distinct. Each feather on the back is finely marked with several semicircular lines of reddish brown and black: the scapulars with a narrow white line along their shafts, and with black and cinereous undulated lines on the webs; whose sides are marked with a large spot of rust color. The greater quill feathers are dusky, spotted on each web with pale red: it has eighteen feathers in the tail; the six outmost on each side are of a bright rust color tipped with white; the others marked transversely with irregular lines of pale reddish brown and black: the legs are of a whitish cast.

The nature of this bird is so well known, that it will be unnecessary to detain the readers *Manners*. with any account of it: all writers agree, that its passion for venery exceeds that of any bird of the genus; should the readers' curiosity be excited to see a more particular account, we beg leave to refer them to those authors who

have recorded this part of its natural history.*

The affection of the female for the young even exceeds the passion above alluded to. I well recollect in my neighbourhood a strong instance. A partridge followed by a large covey of very young birds, was surprised by a violent shower of rain. She collected them under her, and to secure them farther, spread her wings to prevent every injury. In vain! The storm encreased, yet she would not quit her charge, she preferred death, and we found her lifeless (with all the little brood) with distended wings, retaining her attempt to preserve them even to the very article of death.

The *British* name of this bird is *Coriár*, a word now obsolete; that now in use is *Pertrisen*, borrowed from the *Normans*.

* *Pliny* lib. x. c. 23. *Wil. orn.* 168. *Edw. preface to*




- Perdix*, *Coturnix*. *P. mutica*, LaCaille. *Brisson* av. i. 247. 6. *Quail*.
 corpore griseo maculato, *Hist. d'ois.* ii. 449. *Pl. Enl.*
 supercillis albis, rectrici. 170.
 bus margine lunulaque ferruginea. *Lath. ind. orn.* *Tetrao Coturnix*, *Gm. Lin.*
 651. *id. Syn.* iv. 779. *id.* 765.
Sup. i. 222. *Wachtel*, *Faun. Suec. sp.*
La Caille. Belon av. 263. 206.
Geener av. 334. *Vagtel. Brunnich*, 202.
Coturnix Latiporum. Aldr. *Wachtel. Kram*, 357. *Frisch*
 av. ii. 69. i. 117.
Wil. orn. 169. *Perpelitza. Scopoli*, No. 176.
Ruii syn. av. 58. *Br. Zool.* 87. plate M. 8.
Arct. Zool. i. 374.

THE length of the quail is seven inches and *Description*
 a half; the breadth fourteen: the bill is of a
 dusky color; the feathers of the head are black,
 edged with rusty brown; the crown of the
 head divided by a whitish yellow line, begin-
 ning at the bill and running along the hind
 part of the neck to the back: above each eye
 is another line of the same color; the chin and
 throat are of a dirty white; the cheeks spotted
 with brown and white; the breast is of a pale
 yellowish red spotted with black; the scapular
 feathers and those on the back are marked in
 their middles with a long pale yellow line, and

on their sides with ferruginous and black bars; the coverts of the wings are reddish brown, elegantly barred with paler lines bounded on each side with black. The exterior side of the first quill feather is white, of the others dusky spotted with red; the tail consists of twelve short feathers barred with black and very pale brownish red: the legs are of a pale hue.

Quails are found in most parts of *Great Britain*, but not in any quantity: they are birds of passage; some entirely quitting our island, others shifting their quarters. A gentleman, to whom this work lies under great obligations for his frequent assistance, has assured us, that these birds migrate out of the neighbouring inland counties, into the hundreds of *Essex*, in *October*, and continue there all the winter: if frost or snow drive them out of the stubble



These birds are much less prolific than the partridge, seldom laying more than six or seven whitish eggs, marked with ragged rust colored spots: yet the late *Owen Holland, Esq. of Conwy*, once found a nest with twelve eggs, eleven of which were hatched: they are very easily taken, and may be enticed any where by a call.

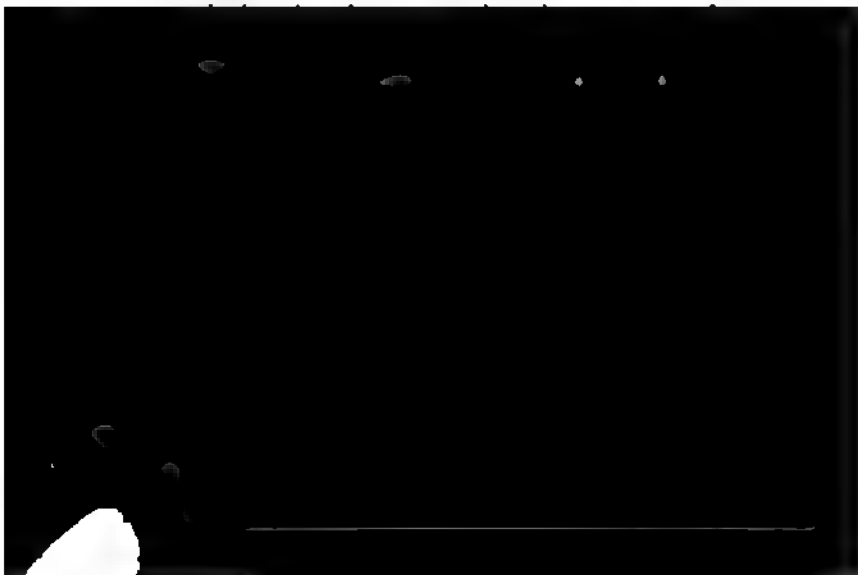
They are birds of great spirit; insomuch that quail fighting among the *Athenians* was as great an entertainment as cock fighting is in this country: it is at this time a fashionable diversion in *China*, and large sums are betted there on the event.* The bodies of these birds are extremely hot; the *Chinese* on that account hold them in their hands in cold weather in order to warm themselves.† *Chaud comme une Caille*, is a common proverb. The ancients never eat this bird, supposing them to have been unwholesome, as they were said to feed on *hellebore*.

Quails arrive in *Italy* the latter end of *April*, and remigrate in *August* and *September*; some remain during the winter.

* *Bell's Travels*, i. 371. + *Osbeck's Voyage*, i. 269.

To the birds of this genus we should add the whole tribe of domestic land fowl, such as Peacocks, Pheasants, &c.; but these cannot claim even an *European* origin.

Peacocks. India gave us Peacocks; and we are assured* they are still found in the wild state, in vast flocks, in the islands of *Ceylon* and *Java*. So beautiful a bird could not long be permitted to be a stranger in the more distant parts; for so early as the days of *Solomon*,† we find among the articles imported in his *Tarshish* navies, Apes and Peacocks. A monarch so conversant in all branches of natural history, who spoke of trees, from the cedar of *Lebanon*, even unto the hyssop that springeth out of the wall: who spoke also of beasts and of fowl, would certainly not neglect furnishing his officers with instructions for collecting every



they were held in such high esteem, that a male and female were valued at *Athens* at 1000 *drachmæ*, or 32*l.* 5*s.* 10*d.* Their next step might be to *Samos*; where they were preserved about the temple of *Juno*, being the birds sacred to the goddess:* and *Gellius*, in his *noctes Atticæ*, c. 16. commends the excellency of the *Samian* peacocks. It is therefore probable that they were brought here originally for the purposes of superstition, and afterwards cultivated for the uses of luxury. We are also told, when *Alexander* was in *India*,† he found vast numbers of wild ones on the banks of the *Hyarotis*, and was so struck with their beauty, as to appoint a severe punishment on any person that killed them.

Peacocks' crests, in antient times, were among the ornaments of the Kings of *England*. *Ernald de Aclent* paid a fine to King *John* in a hundred and forty palfries, with sackbuts, *lorains*, gilt spurs and peacocks' crests, such as would be for his credit.‡

Our common poultry came originally from *Poultry*.

* *Athenæus*. lib. xiv. p. 655.

† *Q. Curtius*. lib. ix.

‡ *Maddox. ant. Exch.* i. 273.

Persia and India. *Aristophanes** calls the cock *mevonts*, *spex*, the *Persian* bird; and tells us, it enjoyed that kingdom before *Darius* and *Megabyzus*: at this time we know that these birds are found in a state of nature in the isles of *Tinian*,† and others of the *Indian* ocean: and that in their wild condition their plumage is black and yellow, and their combs and wattles purple and yellow.‡ They were early introduced into the western parts of the world; and have been very long naturalized in this country: long before the arrival of the *Romans* in this island, *Cæsar* informing us, they were one of the forbidden foods of the old *Britons*. These were in all probability imported here by the *Phœnicians*, who traded to *Britain*, about five hundred years before *Christ*. For all other domestic fowls, turkies, geese, and ducks excepted, we



Pheasants were first brought into Europe Pheasants.
from the banks of the *Phasis*, a river of Col-
chis.

Argiva primùm sum transportata carina,

Ante mihi notum nil, nisi Phasis erat.

Martial. lib. xiii. ep. 72.

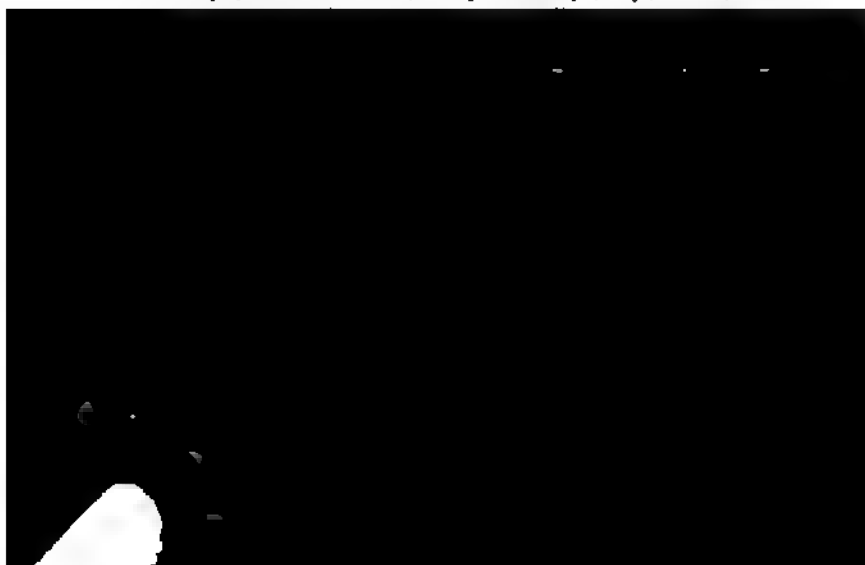
Guinea hen, the *Melagrides* or *Gallinæ* ^{Guinea} ~~ind-~~ ^{hens.}
midicæ of the antients, came originally from
Africa.* We are much surprized how *Beyon*
and other learned ornithologists could possibly
imagine them to have been the same with our
Turkies; since the descriptions of the *melagri*
left us by *Athenæus* and other antient writers,
agree so exactly with the Guinea hen, as to
take away (as we should imagine) all power
of mistake. *Athenæus* (after *Clytus Milesius*, a
disciple of *Aristotle*) describes their nature,
form and colors: he tells us, “ They want
“ natural affection towards their young; that
“ their head is naked, and that on the top of
“ it is a hard round body like a peg or nail;
“ that from the cheeks hangs a red piece of
“ flesh like a beard; that it has no wattles like

* *Bosman's history of Guinea.* 248. *Voyages de Mar-
chais* iii. 323. *Barbot's descr. Guinea.* *Churchill's coll.*
voy. v. 29.

" the common poultry; that the feathers are
 " black spotted with white; that they have no
 " spurs; and that both sexes are so like, as not
 " to be distinguished by the sight."* *Varro*
and Pliny† take notice of their spotted plumage,
 and the gibbous substance on their head: so
 that from these citations we find every cha-
 racter of the Guinea hen, but none that agrees
 with the Turkey.

Turky. *Barbot** informs us that very few turkies are
 to be met with in *Guinea*; and those only in
 the hands of the chiefs of the *European* forts;
 the negroes declining to breed any on account
 of their tenderness, which sufficiently proves
 them not to be natives of that climate. On
 the contrary the same writer says, that the

* "Ἔστι δὲ ἄσπεργοι πρὸς τὰ ἔργα τὸ ὄρεσι, καὶ ὀλιγαὶ τῶν
 πωτινῶν,—ἐπ' αὐτῆς δὲ λάφοι σάκευτοι, σκληρὸν, στρογγύλον ἐξίκοι-



Guinea hens, or as he calls them *Pintadas*, are found there in flocks of two or three hundred, that they perch in trees, and feed on worms and grasshoppers; that they are run down and taken by dogs, and that their flesh is tender and sweet, generally white, though sometimes black. He also remarks that neither the common poultry or ducks are natural to *Guinea*, any more than the *Turkey*. Neither is that bird a native of *Asia*: the first that were seen in *Persia* were brought from *Venice* by some *Armenian* merchants.* They are also cultivated in *Ceylon*, but not found wild. In fact the *Turkey* was unknown to the antient naturalists, and even to the old world before the discovery of *America*. It was a bird peculiar to the new continent, and is now the commonest wild fowl of the northern parts of that country. It was first seen in *France*, in the reign of *Francis I.* and in *England*, in that of *Henry VIII.* By the date of the reign of these monarchs, the first birds of this kind must have been brought from *Mexico*, whose conquest was completed, A. D. 1521, the short lived colony of the *French* in *Florida* not being at-

* *Tavernier*. 146.

tempted before 1562; nor our more successful one in *Virginia*, effected till 1585; when both these monarchs were in their graves.

Ælian, indeed, mentions a bird found in *India*,* which some writers have supposed to be the Turkey, but we conclude with *Gerner*, that it was either the Peacock, or some bird of that genus. On consulting some gentlemen who have long resided in the *East Indies*, we find, that though the Turkey is bred there, it is only considered as a domestic bird, and not a native of the country.

* *Ælian hist. an. lib. xvi. c. 2.*

CLASS II. GREAT BUSTARD.

GENUS XV. BUSTARD.

BILL strong, a little incurvated,

TOES none behind,

THIGHS partly bare of feathers.

- | | | |
|---|--|------------------|
| Otis. Tarda. O. nigro rufo-que undulato-maculata sub-tus albida, capite (maris) juguloque utrinque cristato. <i>Lath. Ind. orn.</i> 658. <i>id. Syn.</i> iv. 796. | <i>Raii syn.</i> av. 58. | 1. <i>Great.</i> |
| Tetrax. <i>Athenæi</i> , lib. ix. 398. | Gustard. <i>Boethii</i> 7. and <i>Sib. Scot.</i> 16. | |
| L'Ostarde. <i>Belon</i> av. 235. | <i>Edw. Tab.</i> 73, 74. | |
| Otis, vel Bistarda. <i>Gesner</i> av. 484, 486. | L'Ostarde. <i>Brisson</i> av. 7. 18. <i>Hist. d'ois.</i> ii. 1. 1. | |
| Otis sive Tarda. <i>Aldr.</i> av. ii. 39. | 1. <i>Pl. Enl.</i> 245. | |
| <i>Wil. orn.</i> 178. | Otis Tarda. <i>Gm. Lin.</i> 726. <i>Faun. Suec. sp.</i> 196. | |
| | Trap. <i>Kram.</i> 355. | |
| | Acker-Trappe. <i>Frisch.</i> i. 106. <i>Scopoli.</i> No. 160. | |
| | <i>Br. Zool.</i> 87. plate N. <i>Arct. Zool.</i> i. 375. | |

THE bustard is the largest of the *British land* *Description* fowl; the male at a medium weighing twenty-five pounds; there are instances of some very old ones weighing twenty-seven pounds. The breadth is nine feet; the length near four. Besides the size and difference of color, the male is distinguished from the female by a tuft of

feathers about five inches long on each side the lower mandible. Its head and neck are ash colored; the back is barred transversely with black and bright rust color; the greater quill feathers are black; the belly white; the tail is marked with broad red and black bars, and consists of twenty feathers; the legs are dusky.

Female. The female is about half the size of the male: the crown of the head is of a deep orange, traversed with black lines; the rest of the head is brown; the lower part of the fore-side of the neck is ash-colored: in other respects it resembles the male, only the colors of the back and wings are far more dull.

Place. These birds inhabit most of the open countries of the south and east parts of this island, from *Dorsetshire*, as far as the *Wolds* in *Yorkshire*.^{*} They are exceedingly shy, and difficult to be shot; run very fast, and when on the wing can fly, though slowly, many miles without resting. It is said that they take flight with difficulty, and are sometimes run down with gre-hounds. They keep near their old

^{*} In Sir Robert Sibbald's time they were found in the *Mers*, but I believe that they are now extinct in *Scotland*.

haunts, seldom wandering above twenty or thirty miles. Their food is corn and other vegetables, and those large earth worms that appear in great quantities on the Downs, before sun-rising in the summer. These are replete with moisture, answer the purpose of liquids, and enable them to live long without drinking on those extensive and dry tracts. Besides this, nature hath given the males an admirable magazine for their security against drought, being a pouch,* whose entrance lies immediately under the tongue, and which is capable of holding near seven pints; and this they probably fill with water, to supply the hen when sitting, or the young before they can fly. Bustards lay only two eggs, of the size of those of a goose, of a pale olive brown, marked with spots of a darker color; they make no nest, only scrape a hole in the ground. In autumn they are (in *Wiltshire*) generally found in large turnep fields near the Downs, and in flocks of fifty or more.

* The world is obliged to the late Dr. *Douglas* for this discovery; and to Mr. *Edwards* for communicating it.

2. *Lesser. Otis Tetrax.* O. nigro rufo alboque variegata, subtus alba, capite juguloque levi. *Lath. ind. orn.* 659. *id. Syn.* iv. 759. *id. Sup.* i. 226.
- The French Cansu-petiere. *Will orn.* 179.
La petite outard. *Brisson av.* v. 24. *Hist. d'ois.* ii. 40. *Pl. Enl.* 10, 25.
Otis Tetrax. Gm. Lin. 725.
Arct. Zool. i. 375.

THERE are three or four instances of this species having been shot in *England*, but the specimens I have seen have all been female. Whether they were accidental stragglers from the continent, or whether they breed here, and the male has escaped the sportsman's notice, is not yet ascertained.

This bird is about the size of a pheasant. The male, which I have seen in *France*, varies much in the colors of the neck from the female,



CLASS II. THICK-KNEED BUSTARD. 413

white; the middle feathers of the tail, tawny barred with black; the rest white; legs cinereous.

The neck of the female agrees in colors with *Female*. the back: in other respects the marks pretty nearly agree.

It inhabits open countries; feeds on grain, seeds, and insects.

- | | | |
|------------------------------------|--|------------------------|
| Otis Œdicnemus, O. grisea, | <i>Raii syn. av.</i> 108. | 3. <i>Thick-kneed.</i> |
| remigibus primoribus du- | Le grand Pluvier, Courly | |
| abus nigris medio albis, | de terre. <i>Brisson av.</i> v. | |
| rostro acuto, pedibus ci- | 76. <i>Tab. 7. fig. 1. Hist.</i> | |
| nereis. <i>Lath. ind. orn.</i> | <i>d'ois.</i> viii. 105. <i>Pl. Ent.</i> | |
| 661. <i>id. Syn.</i> iv. 806. | 919. | |
| Un Ostardeau, Œdicnemus. | Charadrius Œdicnemus. | |
| <i>Belon av.</i> 239. | <i>Gm. Lin.</i> 689. | |
| Charadrius (Triel vel Griel). | Kervari. <i>Hasselquist Itin.</i> | |
| <i>Gesner av.</i> 256. | 210? <i>Engl. Ed.</i> 200. | |
| The Stone Curlew. <i>Wil. orn.</i> | Norfolk Plover. <i>Br. Zool.</i> | |
| 306. | ii. 378. <i>Br. Zool. fol.</i> 127. | |

THE weight of this species is eighteen ounces. *Description*
 The length to the tail eighteen inches: the breadth thirty-six. The head is remarkably round; the space beneath the eyes is bare of feathers, and of a yellowish green; the irides

414 THICK-KNEED BUSTARD. CLASS II.

yellow; the feathers of the head, neck, back, and scapulars, and coverts of the wings are black, edged deeply with a pale reddish brown; the belly and thighs are of a pure white; the two first quill feathers are black, marked on the middle of each web with a large white spot. The tail consists of twelve feathers; the tips of the two outmost are black, beneath is a broad white bar, the remaining part barred with white and dusky brown; in the next feathers the white lessens; in the middle it almost disappears, changing to a pale reddish brown, mottled with a darker; its mouth very wide; the legs are of a fine yellow; the toes very short, bordered with a strong membrane; the knees thick, as if swelled, like those of a gouty man: from whence *Belon* gives it the name of *Ædicnemus*.*

This bird seems unknown in the western parts of this kingdom; but is found in *Hampshire*, *Norfolk*, and on *Lincoln heath*, where, from a similarity of colors to the curlew, it is called the *Stone Curlew*. It breeds in some places in rabbit burrows; also among stones on

* From οἶδαν, and αἰμίαν.

CLASS II. THICK-KNEED BUSTARD. 415

the bare ground, laying two eggs of a copper color, spotted with a darker red. The young run soon after they are hatched. These birds feed in the night on worms and caterpillars: they will also eat toads; and *Gesner* says they will catch mice, which is confirmed by *Hasselquist*.

They make a most piercing shrill noise, which they begin in the evening; and are so loud, as to be heard nearly a mile in a still night. They inhabit fallow lands and downs; affect dry places, never being seen near any waters. When they fly, they extend their legs straight out behind; are very shy birds; run far before they take to wing; and often squat: are generally seen single, and are esteemed very delicate food. In habit, make, and manners, these birds approach near to the Bustard. We have therefore removed them into this genus, from that of Plovers.

They are migratory: appear in *England* about the middle of *April*, and retire in autumn.

SECT. IV. COLUMBINE.

GENUS XVI. PIGEON.

BILL soft straight.

NOSTRILS lodged in a tuberos naked skin.

TOES divided to their origin.

1. *Common.* *Columba domestica.* C. minor versicolor, dorso inferiore albo. *Lath. ind. orn.* 589. *id. Syn.* iv. 605. *Pl. Enl.* 466. Le^e Biset. *Brisson av.* i. 82. *Hist. d'ois.* i. 82. *Pl. Enl.* 510. Le Rocheraye. *Brisson av.* i. 84.
- La Pigeon privé.* *Belon av.* 313. *Columba Cenas, domestica*
- Columba vulgaris.* *Gesner* β. *Lin. Syst.* 279. *C. domestica.* *Gm. Lin.* 769.
- Columba domestica.* *Aldr.* Skogs dufwa, Dufwa, Hemdufwa. *Faun. Suec. sp.* av. ii. 225. 907.
- Common wild Dove, or Pigeon.* *Wil. orn.* 180. Kirke-Doe, Skov-Doe.
- Rock Pigeon.* *ib.* 186. *Brunnich,* 203.
- Rait syn. av.* 59. *C. rupico-* Feldtaube, Haustaube,



CLASS II. COMMON PIGEON. 417

the Rock Pigeon. These birds, as *Varro** observes, take their Latin name, *Columba*, from their voice or cooing; and had he known it, he might have added the *Britisk*, &c. for *Colommen*, *Kylobinan*, *Kulm* and *Kalm*, signify the same bird. They were, and still are, found in this kingdom in a state of nature, especially on the vast rocks which impend over the sea. The *French* call them *Rocherayes*, and some old sportsmen in the south of *England*, *Rockiers*. They swarm in the *Orknies* and *Hebrides*. In the first they collect by thousands towards winter, and do great injury to the rick-yards. I have seen in *Ilay* the bottoms of the great chasms, covered with their dung for many feet in thickness, which is drawn up in buckets, and used successfully as a manure. Notwithstanding this species is so easily domesticated, yet it is difficult to tempt them to continue regularly in a dove-cot near to their natural haunts. I am acquainted with one, not far from those vast rocks, the *Orms-head*, where they will reside on account of the supply of food provided for them, till the breeding season, at which time, the greater part of the flock

* *De Ling. Lat.* lib. iv.

quit the artificial holes, and return to the rude habitations on the neighbouring promontories. *Virgil*, as a familiar occurrence, describes the Pigeon as haunting the caverns of a rock in such beautiful numbers, that I cannot forbear repeating his simile :

Qualis speluncâ subito commota COLUMBA
Cui domus et dulces latebroso in pumice nidi,
Fertur in ævâ volans, plausumque exterrita pennis
Dat tecto ingentem—mox aere lapsa quieto
Radit iter liquidum, celeres neque commovet alas.*

As when a Dove her rocky hold forsakes,
Rous'd in a fright, her sounding wings she shakes;
The cavern rings with clattering—out she flies,
And leaves her callow care, and cleaves the skies:
At first she flutters; but at length she springs
To smoother flight, and glides upon her wings.

DRYDEN.

Description. This bird in its native state weighs about



CLASS II. COMMON PIGEON. 419

wings bluish ash-color; the greater crossed with a black bar; the primaries cinereous, tipped with black; the lower part of the back white, a constant and specific mark; the tail cinereous: the outmost web of the exterior feather white almost to the end, which, with those of all the rest, is crossed with a black bar; the legs purplish red.

The varieties produced from the domestic *Varietics*. pigeon are very numerous, and extremely elegant; these are distinguished by names expressive of their several properties, such as *Tumblers*, *Carriers*, *Jacobines*, *Croppers*, *Powters*, *Runts*, *Turbits*, *Owls*, *Nuns*,* &c. The most celebrated of these is the *Carrier*, *Carrier*. which from the superior attachment that pigeon shews to its native place, is employed in many countries as the most expeditious courier: the letters are tied under its wing, it is let loose, and in a very short space of time returns to the home it was brought from, with its advices.†

* Vide *Wil. orn. Moore's Columbarum*, and a treatise on domestic pigeons, published in 1765. The last illustrates the names of the birds, with several neat figures.

† This custom was observed by that legendary traveller, Sir John Maundevile, knight, warrior and pilgrim; who, with the true spirit of religious chivalry, voyaged

This practice was much in vogue in the East; and at *Scanderoon*, till of late years,* used on the arrival of a ship, to give the merchants at *Aleppo* a more expeditious notice than could be done by any other means. In our own country, these aërial messengers have been employed for a very singular purpose, being let loose at *Tyburn* at the moment the fatal cart was drawn away, to notify to distant friends, the departure of the unhappy criminal.

In the East, the use of these birds seems to have been improved greatly, by having, if we

into the East, and penetrated as far as the borders of *China*, during the reigns of *Edward II.* and *III.*

"In that contree," says he, "and other contrees bezonde, thei han a custom, whan thei schulle useu werre, and whan men holden sege abuten cytes or castelle, and thei withinnen dur not senden out messagers with lettere, fro lord to lord, for to ask sokour, thei maken here letters and bynden hem to the necke of a *Cotter*, and leten the



CLASS II. COMMON PIGEON. 421

may use the expression, relays of them ready to spread intelligence to all parts of the country. Thus the governor of *Damiata* circulated the news of the death of *Orrilo*:

Tosto che'l Castellan di *Damiata*
 Certificossi, ch'era morto *Orrilo*,
 La *Colomba* lasciò, ch'avea legata
 Sotto l'ala la lettera col filo.
 Quelle andò al *Cairo*, ed indi fu lasciata
 Un' altra altrove, come quivi e stilo:
 Si, che in pochissime ore andò l'avviso
 Per tutto *Egitto*, ch'era *Orrilo* ucciso.*

But the simple use of them was known in very early times: *Anacreon* tells us, he conveyed his billet-doux, to his beautiful *Bathyllus*, by a dove.

Εγὼ δ' Ἀνακρείῳ
 Διάκονῳ τοσαῦτα
 Καὶ νῦν οἷας ἐκείνου
 Ἐπιστολας κομίζω.†

I am now *Anacreon's* slave,
 And to me entrusted have

* 'As soon as the commandant of *Damiata* heard that
 ' *Orrilo* was dead, he let loose a pigeon, under whose wing
 ' he had tied a letter; this fled to *Cairo*, from whence a
 ' second was dispatched to another place, as is usual; so
 ' that in a very few hours, all *Egypt* was acquainted with
 ' the death of *Orrilo*.' *Ariosto*, canto 16.

† *Anacreon*, ode 9. ἡς πιστιγάν.

All the o'erflowings of his heart
To *Bathyllus* to impart;
Each soft line, with nimble wing,
To the lovely boy I bring.

Taurosthenes also, by means of a pigeon he had decked with purple, sent advice to his father, who lived in the isle of *Ægina*, of his victory in the *Olympic* games, on the very day he had obtained it.* And, at the siege of *Modena*, *Hirtius* without, and *Brutus* within the walls, kept, by the help of pigeons, a constant correspondence; baffling every stratagem of the besieger *Antony*,† to intercept their couriers. In the times of the *Crusades*, there are many more instances of these birds of peace being employed in the service of war: *Joinville* relates one during the crusade of *Saint Louis*:‡ and *Tasso* another, during the siege of *Jerusalem*.§

The nature of pigeons is to be gregarious:



the year;* to bill in their courtship; for the male and female to sit by turns, and also to feed their young: to cast their provision out of their craw into the young ones' mouths; to drink, not like other birds by sipping, but by continual draughts like quadrupeds; and to have notes mournful, or plaintive.

Columba Œnas C. cœrulescens, cervice viridi-nitente, dorso postico cinerascente, fascia alarum duplici apiceque caudæ nigricante. *Lath. ind. orn.* 589. *id. Syn.* iv. 604. *id. Sup.* i. 197.

Œnas seu vinago. *Raii syn.* av. 62. A. 10.

Gesner av. 307.

Stock dove or Wood Pigeon.

Wil. orn. 185.

Le Pigeon sauvage. *Brisson av.* i. 86.

Le Pigeon fuyard. *Belon av.* 78. *Gm. Lin.* 769.

Arct. Zool. ii. 9.

2. Stock Dove.

THE head, neck, and beginning of the back, *Description* are of a fine bluish grey: the sides of the neck marked with a variable green spot; the coverts of the wings grey, the most remote marked

* So quick is their produce, that the author of the *Oeconomy of nature* observes, that in the space of four years, 14,760 may come from a single pair. *Stillingfleet's tracts*, 75.

with black spots; the primaries dusky; the secondaries grey, the farthest spotted like the coverts; the lower part of the back and the rump of a very pale grey; the breast vinaceous; the belly of a light grey; the tail of the same color, except the exterior side of the outmost feather, which is white; the ends of all are black. The length is fourteen inches and a half; the extent, two feet two; the weight fourteen ounces.

Manners. This species is migratory, and arrives in *Hampshire* the latest of any bird of passage. Flocks of them appear towards the latter end of *November*, and retire early in the spring. They probably come from *Sweden*, for the time of their migration and remigration in that country coincides with their appearance and disappearance in *Britain*. When the south

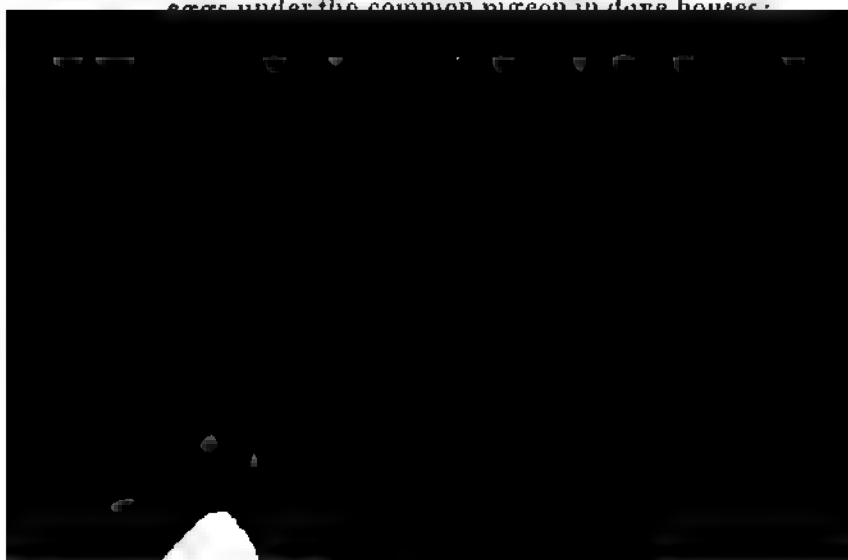


make their nests in the hollows of stocks of trees, from which they take their name. I have also been informed by the reverend Mr. *Ashby*, of *Barrow*, near *Newmarket*, that multitudes breed in the rabbit burrows on the sandy plain of *Suffolk* about *Brandon*, and that the shepherds annually take the young for sale.

These perch and roost in trees, which the Rock and domestic kinds never do: yet a few Rock-Pigeons have been often seen mixed with the flights of Stock Doves. I have also frequently observed some of these (which are easily known by their grey backs) mingling among the flocks of tame pigeons, and breeding with them. This, therefore, causes me to suspect the Stock Dove may likewise contribute to add to the domestic kinds, as their place of nidification in a state of nature is in holes of trees, as that of the others is in holes of rocks.

3. *Ring. Columba. Palumbus. C. cinerea*, reatricibus postice atris, remigibus primoribus margine exteriori albidis, collo utrinque albo. *Luth. ind. orn.* 601. *id. Syn.* iv. 635. *id. Sup.* i. 198.
- Le Ramier. Belon av.* 307.
- Phaasa. Belon obs.* 13.
- Palumbus. Gesner av.* 310.
- Palumbus major sive torquatus. Aldr. av.* ii. 227.
- Colombaccio. Olina,* 54.
- Ring-dove, Queest, or Cúshat. Wil. orn.* 185.
- Rati syn. av.* 62.
- Le Pigeon Ramier. Brisson av.* i. 89. *Hist. d'ois.* ii. 531. *Pl. Ent.* 316.
- Griunik. Scopoli, No.* 178.
- Columba Palumbus. Gm. Lin.* 776.
- Ringdofwa, Siutut. Faun. Suec. sp.* 208.
- Wildtaube, Ringeltaube. Kram.* 359.
- Ringel-Taube. Frisch.* i 138.
- Dan. Ringel-due Bornholmis, Skude. Brunnich,* 204.
- Br. Zool.* 89. plate O. *Arct. Zool.* ii. 10.

THIS species forms its nest of a few dry sticks in the boughs of trees: attempts have been made to domesticate them, by hatching their eggs under the common pigeon in dove houses:



all others by the size. Its weight is about twenty ounces; its length eighteen inches; its breadth thirty. The head, back, and coverts of the wings are of a bluish ash color; the lower side of the neck and the breast are of a purplish red, dashed with ash color; on the hind part of the neck is a semicircular line of white; above and beneath that the feathers are glossy, and of changeable colors as opposed to the light; the belly is of a dirty white; the greater quill feathers are dusky; the rest ash colored; underneath the bastard wing is a white stroke pointing downwards.

[This species is also migratory: it quits *Sweden* in the autumn, and returns early in the spring; it is not found in *Norway* or within the arctic zone, by reason not only of the cold but of defect of food.*]

* *Arct. Zool.* ii. 10.

The Starling visits *Italy* in February, migrates in October.

- 2. Water-Ouzel.** *Turdus Cinclus*. *T. fusco-nigricans*, genis gutture collo inferiore et pectore niveis, ventre supremo fusco-rufescente, imo rectricibusque nigricantibus. *Lath. ind. orn.* 343. *id. Syn.* iii. 48. *id. Sup.* i. 142.
- Merula aquatica*. *Gesner av.* 608.
- Lerlichirolo*. *Aldr. av.* iii. 166.
- Water-crow. *Turner*.
- The Water-Ouzel, or Water-Crake. *Wil. orn.* 149.
- Rall syn. av.* 66.
- Sturnus Cinclus*. *Gen. Lin.* 803.
- Watnstare. *Faun. Suec. sp.* 214.
- Povodni Koss. *Scopoli. No.* 777.
- Le Merle d'eau. *Brisson av.* v. 252. *Hist. d'ois.* viii. 131. *Pl. Enl.* 940.
- Merlo aquatico. *Linna.* 109.
- Norvegis*, Fosse Fald, Fosse Kald, Quærn Kald, Stroem-Star, Bække Eagl. *Brunnich*, 230.
- Wasser-amsel, Bach-amsel. *Kram.* 374.
- Br. Zool.* 92. plate P. 1. f. 2.
- Arct. Zool.* li. 13.



constructed in a curious manner, of hay and fibres of roots, and lined with dead oak leaves, having a portico, or grand entrance made with green moss. It feeds on insects and small fish; and as Mr. Willughby observes, though not web-footed, will dart itself after them quite under water.

Its weight is two ounces and a half; the *Description.* length seven inches one quarter; the breadth eleven; the bill is narrow, and compressed sideways; the eyelids are white; the head, cheeks, and hind part of the neck are dusky, mixed with rust color; the back, coverts of the wings, and of the tail also dusky, edged with bluish ash color; the throat and breast white; the belly ferruginous, vent feathers a deep ash color; the legs are of a pale blue before, black behind; the tail short and black, which it often flirts up, as it is sitting.

[Mr. Pennant in his tour to *Alston Moor*, *Var. A.*² p. 159, thus describes either a singular variety *Penrith Ouzel.* or a new species of Water-Ouzel, shot near *Penrith*. It is rather superior in size to the common water-ouzel; the head, wings, upper part of the body, and tail are dusky; the chin

and throat white; at the bottom of the last is a dusky bar; the breast, belly, and thighs are white, marked with short black strokes, pointing downwards, most numerous towards the lower part of the belly and the thighs; the vent is of a rusty yellow crossed with bars of black; the legs are of a rusty yellow.]



GENUS XIX. THRUSH.

BILL strait, a little bending at the point, with a small notch near the end of the upper mandible.

TOE outmost adhering as far as the first joint to the middle toe.

TONGUE divided and jagged.

GULLET bristly.

Turdus viscivorus. T. supra griseo-fuscus, subtus albo-flavicans, maculis nigricantibus variis, rectricibus tribus extimis albo terminatis. *Lath. ind. orn.* 326. *id. Syn.* iii. 16.

La Grive ou Siserre. *Belon av.* 324.

Turdus viscivorus. *Gesner av.* 759.

Aldr. av. ii. 273.

Tordo. *Olin.* 25.

Missel-bird, or Shrite. *Wil. orn.* 187.

Raii syn. av. 64.

Misseltoe-thrush, or Shreitch. *Charlton ex.* 89.

Turdus viscivorus. *Gm. Lin.* 1. *Missel.* 806.

Tordo viscada, Zicchio. *Zinan.* 39.

La Draine. *Hist. d'oie.* iii. 295. *Pl. Enl.* 489.

La grosse grive, *Turdus major*. *Brisson av.* ii. 206.

Biork-Trast. *Faun. Suec.* sp. 216.

Dobbelt-Kramsfogel. *Brunnich,* 231.

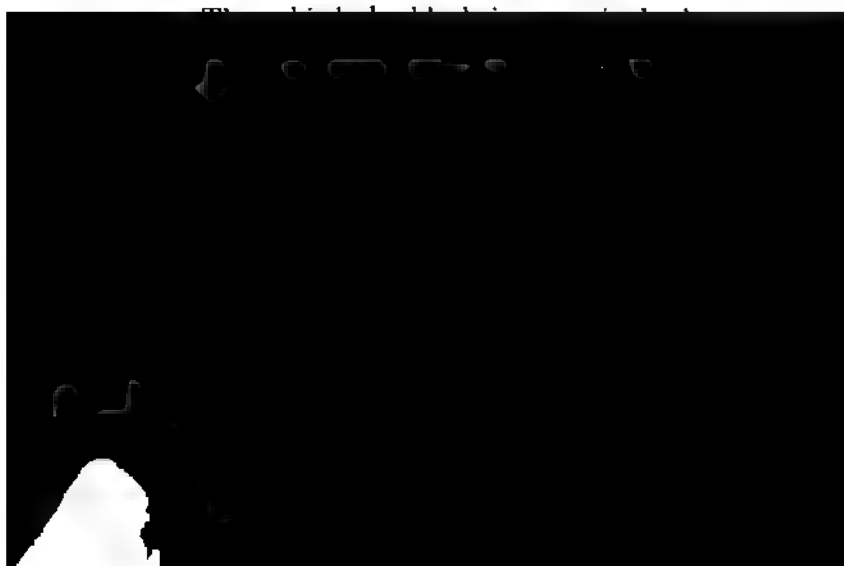
Zariker, Mistler, Zerrer. *Kram.* 361.

Mistel-Drossel, or Schnarre. *Scopoli, No.* 193. *Frisch.* i. 25.

Br. Zool. 90. plate P. f. 1. *Act. Zool.* ii. 24.

THIS is the largest of the genus, and weighs

nearly five ounces. Its length is eleven inches: its breadth sixteen and a half. The bill is shorter and thicker than that of other thrushes; dusky, except the base of the lower mandible, which is yellow. The irides are hazel. The head, back, and lesser coverts of the wings are of a deep olive brown; the lower part of the back tinged with yellow; the lowest order of lesser coverts, and the great coverts brown; the first tipt with white, the last both tipt and edged with the same color; the quill feathers, and secondaries dusky, but the lower part of the inner webs white; the inner coverts of the wings white. The tail brown; the three outermost feathers tipt with white. The cheeks and throat are mottled with brown and white; the breast and belly whitish yellow, marked with large spots of black: the legs yellow.



the new year, in blowing showery weather, which makes the inhabitants of *Hampshire* call them the *Storm-cock*. They feed on insects, holly and misseltoe berries, which are the food of all the thrush kind: in severe snowy weather, when there is a failure of their usual diet, they are observed to scratch out of the banks of hedges, the root of *Arum*, or the cuckoo pint: this is remarkably warm and pungent, and a provision suitable to the season.

This bird migrates into *Burgundy* in the months of *October* and *November*: in *Great Britain*, it continues the whole year. The *Welsh* call it *Pen y llwyn*, or the master of the cop-pice, as it will drive all the lesser species of thrushes from it. The ancients believed that the misseltoe (the basis of bird-lime) could not be propagated but by the berries that had past through the body of this bird; and on that is founded the proverb of *Turdus malum sibi cacat*.

It may be observed, that this is the largest bird, *British* or foreign (within our knowledge) that sings or has any melody in its note: the notes of all of a superior size, being either screaming, croaking, or chattering, the pigeon

kind excepted, whose slow plaintive continued monotone has something sweetly soothing in it. *Thomson* (the naturalist's poet) in the concert he has formed among the feathered tribe, allows the imperfection of voice in the larger birds, yet introduces them as useful as the base in chorus, notwithstanding it is unpleasing by itself.

The jay, the rook, the daw,
And each harsh pipe (discordant heard alone)
Aid the full concert: while the stock-dove breathes
A melancholy murmur through the whole.*

* *Seasons. Spring. l. 606.*

- Turdus Pilaris*. *T. fusco-rufescens*, subtus nigricante variis, rectricibus nigris, extimis margine interiore apice albicantibus, capite uropygioque cano. *Lath. ind. orn.* 330. *id. Syn.* iii. 24.
- La Litorne*. *Belon av.* 328.
- Turdus pilaris*. *Gm. Lin.* 807. *Germer av.* 753.
- Aldr. av.* ii. 274.
- Wil. orn.* 188.
- Rait syn. av.* 64.
- La Litorne*, ou *Tourdelle*. *Brisson av.* ii. 214. *Hist. d'oïis.* iii. 301. *Pl. Enl.* 490.
- Kramsfugl, anoskata *Faun.* 2. *Fieldfare*. *Succ. No.* 215.
- Brinanka. *Scopoli. No.* 194.
- Dan.* Dobbelt Kramsfugl. *Cimbris.* Snarrer. *Norvegis.* Graue Trost, Field-Trost, Nordenvinds Pibe, *Bornholmis*, Simmeren. *Br.* 232.
- Kranabets vogel, Kranabeter. *Kram.* 361.
- Wacholder-Drossel, (Juniper Thrush), or Ziemer. *Frisch.* i. 26.
- Br. Zool.* 90. plate P. 2. f. 1. *Arct. Zool.* ii. 23.

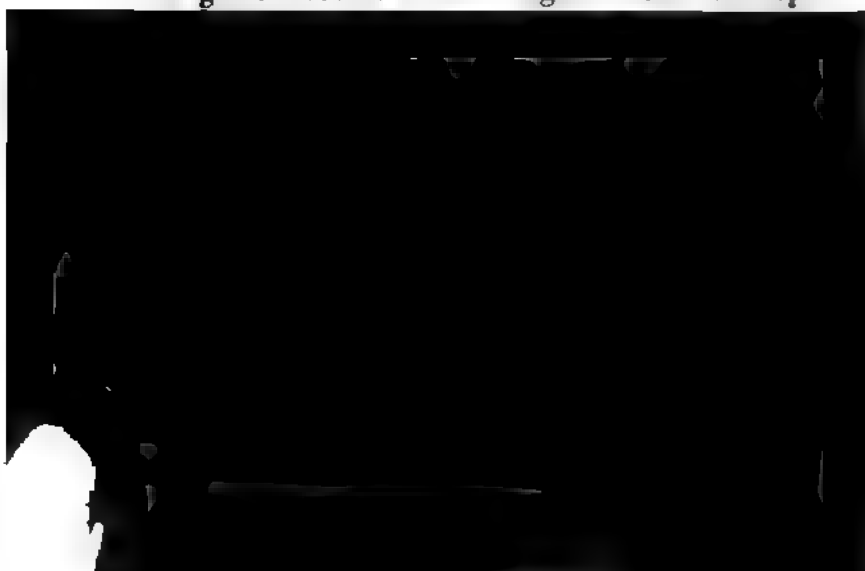
THIS bird passes the summer in the northern parts of *Europe*; also in lower *Austria*.* It breeds in the largest trees;† feeds on berries of all kinds, and is very fond of those of the juniper. Fieldfares visit our islands in great flocks about *Michaelmas*, and leave us the latter end of *February*, or the beginning of *March*. We suspect that the birds that migrate here, come from *Norway*, &c. forced by the exces-

* *Kram. elench.* 361.† *Faun. Succ. sp.* 78.

sive rigor of the season in those cold regions; as we find that they winter as well as breed in *Prussia, Austria,** and the moderate climates.

These birds and the Redwings were the *Tur-di* of the *Romans*, which they fattened with crumbs of figs and bread mixed together. *Varro* informs us that they were birds of passage, coming in autumn, and departing in the spring. They must have been taken in great numbers, for they were kept by thousands together in their fattening aviaries.† They do not arrive in *France* till the beginning of *December*.

Description. These birds weigh generally about four ounces; their length is ten inches, their breadth seventeen. The head is ash-colored inclining to olive, and spotted with black; the back and greater coverts of the wings are of a fine deep



Turdus musicus. *T. supra*
griseo-fuscus, subtus albo-
rufescens maculis nigri-
cantibus varius, remigibus
basii interiore ferrugineis.
Lath. ind. orn. 327. id. Syn.
iii. 18. id. Sup. i. 139.

La petite Grive. Belon av.
226.

Turdus minor alter. Gesner
av. 762.

Aldr. av. ii. 275.

Sturno. Olinq, 18.

Mavis, Thrastle, or Song
Thrush. Wil. orn. 188.

Raii syn. av. 64.

La petite Grive, Turdus mi-
nor. Brisson av. ii. 205.

Hist. d'oie. iii. 280. Pl. 3. Thrastle.
Enl. 406.

Turdus musicus. Gm. Lin.
809.

Faun. Suec. sp. 217.

Turdus in altissimis. Klein
stem. av. Tab. 13.

Weindroschl, Weissdroschl,
Sommer-droschl. Kram.
361.

Sing-Drossel, or Weiss-
drossel. Frisch. i. 27.

Cimbris & Bornholmis, Vun-
drossel. Norwegis, Tale
Trast. Br. 236.

Drasich. Scopoli. No. 195.

Br. Zool. 91. plate P. f. 2.

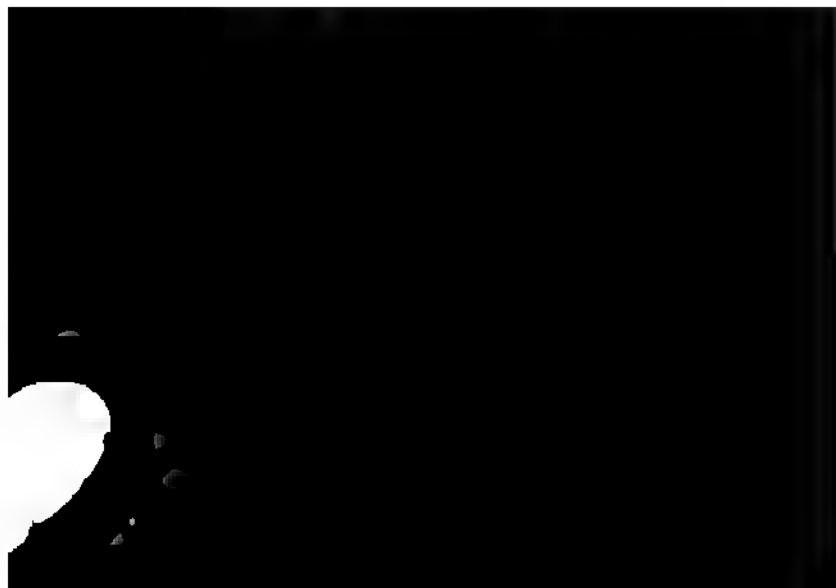
Arct. Zool. ii. 25.

THE weight of this species is three ounces: the length nine inches: the breadth thirteen inches and a half. In colors it so nearly resembles the missel thrush, that no other remark need be added, but that it is less, and that the inner coverts of the wings are yellow.

The thrastle is the finest of our singing birds, not only for the sweetness and variety of its notes, but for the long continuance of its har-

mony; for it obliges us with its song for nearly three parts of the year. Like the missel bird, it delivers its music from the top of some high tree; but to form its nest descends to some low bush or thicket. The nest is made of earth, moss, and straws, and the inside is curiously plaistered with clay. It lays five or six eggs, of a pale bluish green, marked with dusky spots.

In *France* these birds are migratory: in *Burgundy*, they appear just before vintage, in order to feed on the ripe grapes, are therefore called there *la Grive de vigne*: retire at the first frosts, return in *March* and *April*, as if it were to disappear again in *May*. A few stragglers stay to breed. In *Italy* they arrive in *April* and *May*, and return before *October*.



- Turdus Iliacus.** T. griseo-fuscus, subtus albidus maculis fuscis, alis subtus ferrugineis, superciliis albicantibus. *Lath. ind. orn.* 329. *id. Syn.* iii. 22. **Le Mauvis.** *Belon av.* 327. **Turdus minor.** *Gesner av.* 761. **T. Illassen Tylas.** *Aldr. av.* ii. 275. **Redwing, Swinepipe, or Wind Thrush.** *Wil. orn.* 189. *Raii syn. av.* 54. **Le Mauvis.** *Brisson av.* ii. 4. *Redwing.* 208. *Tab.* 20. *fig.* 1. *Hist. d'oïs.* iii. 309. *Pl. Ent.* 51. *Scopoli, No.* 196. **Turdus iliacus.** *Gm. Lin.* 808. **Klera, Kladra, Tall-Trast.** *Faun. Suec. sp.* 218. **Rothdroschl, Walddroschl, Winterdroschl.** *Kram.* 361. **Wein-Drossel. Roth-Drossel.** *Frisch.* i. 28. *Br. Zool.* 91. plate P. f. 2. *Arct. Zool.* ii. 25.

THESE birds appear in *Great-Britain* a few days before the fieldfare; they come in vast flocks, and from the same countries. With us they have only a disagreeable piping note, but in *Sweden*, during the spring they sing very finely, perching on the top of some tree among the forests of maples. They build their nests in hedges, and lay six bluish green eggs spotted with black.*

They have a very near resemblance to the *Description* thristle, but are less, only weighing two

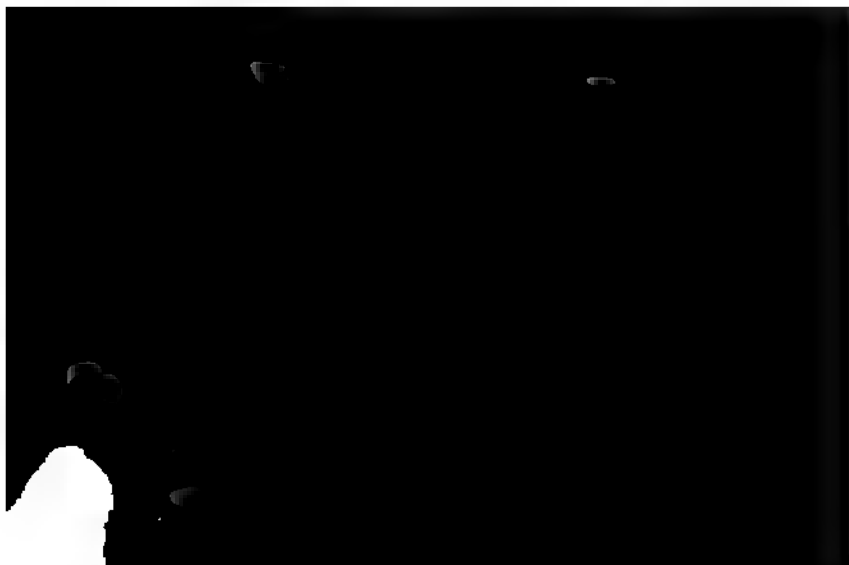
* *Faun. Suec. sp.* 218.

444 REDWING THRUSH. CLASS II.

ounces and a quarter: their colors are much the same, but the sides under the wings and the inner coverts in this are of a reddish orange; in the throistle yellow: above each eye is a line of yellowish white, beginning at the bill and passing towards the hind part of the head. The vent feathers are white.

Besides these three sorts of throistles, the author of the *Epitome of the art of husbandry*,* mentions a fourth kind under the name of the *heath throistle*, which he commends as far superior to the others in its song: he says it is the least of any, and may be known by its dark breast; that it builds its nest by some heath-side, is very scarce, and will sing nine months in the year.

* By J. B. *gent.* third edit. 1685.



- Turdus Merula.** *T. ater*, rostro palpebrisque fulvis. 227. *Hist. d'ois.* iii. 330. 5. *Blackbird*
Lath. ind. orn. 340. *id.* *Pl. Enl.* 2.
Syn. iii. 43. *id.* *Sup.* i. *Turdus Merula.* *Gm. Lin.*
141. 831.
Le Merle noir. *Belon av.* *Kohl-Trast.* *Faun. Suec.*
320. *sp.* 220.
Merula. *Gesner av.* 602. *Dan. & Norvegis Solsort.*
Aldr. av. ii. 276. *Br.* 234.
Merlo. *Zinan.* 39. *Olin.* *Amsel, Amarl. Kram.* 300.
29. *Schwartz Amsel.* *Frisch.*
Wil. orn. 190. *i.* 29.
Raii syn. av. 65. *Koss. Scopoli, No.* 197.
La Merle. *Brisson av.* ii. *Br. Zool.* 92. *Arct. Zool.*
ii. 29.

THIS bird is of a very retired and solitary nature; frequents hedges and thickets, in which it builds earlier than any other bird. The nest is formed of moss, dead grass, fibres, &c. lined or plaistered with clay, and that again covered with hay or small straw. It lays four or five eggs of a bluish green color, marked with irregular dusky spots. The note of the male is extremely fine, but too loud for any place except the woods; it begins to sing early in the spring, continues its music part of the summer, desists in the moulting season;

but resumes it for some time in *September*, and the first winter months.

Description. The color of the male, when it has attained its full age, is of a fine deep black, and the bill of a bright yellow; the edges of the eyelids yellow. When young the bill is dusky, and the plumage of a rusty black, so that it cannot be distinguished from the female; but at the age of one year it attains its proper color.

The blackbird continues in *Italy* the whole year.



CLASS II. ROSE COLORED OUZEL. 447

- Turdus roseus*. *T. subincarnatus*, capite alis caudaque nigris, occipite cristato.
Lath. ind. orn. 344. *id. Syn.* iii. 50. *id. Sup.* i. 142.
Merula rosea. *Rait syn. av.* 67. *Aldr. av.* ii. 283.
Wil. orn. 194.
Le Merle Couleur de Rose.
- Brisson av.* ii. 250. *Hist. 6. Rose d'ois.* iii. 348. *Pl. Enl. colored Ouzel.* 251.
Turdus roseus. *Gm. Lin.* 819.
Faun. Suec. sp. 219.
Edw. 20.
Br. Zool. Ato. ii. *App.* 533.
tab. v. Arct. Zool. ii. 27.

MR *Edwards* discovered this beautiful bird twice in our island, once near *London*, at *Norwood*, and another time in *Norfolk*. The figure of this and of the Oriole, were copied, by permission, from his excellent and accurate designs, which we gratefully acknowledge, as well as every other assistance from our worthy friend, whose pencil has done so much honor to our country, as the integrity of his heart, and communicative disposition, have procured him esteem from a numerous and respectable acquaintance.

The size of this bird appears by the print to *Description*. be equal to that of a stare. The bill at the point is black, at the base of a dirty flesh color: the head is adorned with a crest hanging back-

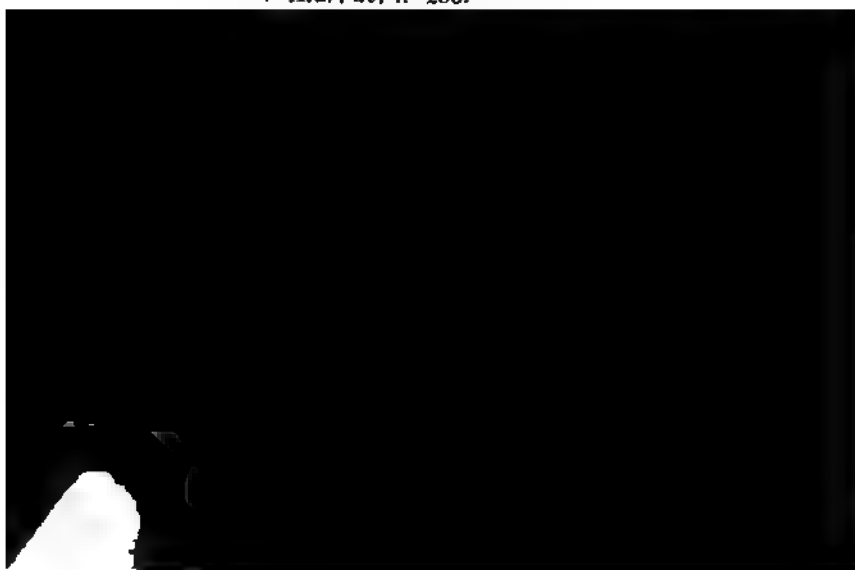
448 ROSE COLORED OUZEL. CLASS II.

wards. The head, crest, neck, wings, and tail are black, glossed with a changeable blue, purple and green: the breast, belly, back, and lesser coverts of the wings, are of a rose color, mixed with a few spots of black: the legs are of a dirty orange color.

This bird is found in *Lapland*, *Italy*, and *Syria*. About *Aleppo* it is called the *locust bird*, possibly from its food; and appears there only in summer.* In *Italy* it is styled the *sea-stare*; and, as *Aldrovandus* says, frequents heaps of dung.† Mr. *Ekmarck*‡ informs us that it resides in *Lapland*, never passing beyond the limits of that frozen region. We have mentioned very opposite climes, but believe it to be a scarce bird in all, at lest in *Europe*.

* *Russel's hist. Alep.* 70. *Tavernier*, 146.

† *Aldr. av.* ii 283.




- Turdus torquatus*. *T. nigricans*, torque albo, rostro flavescente. *Lath. ind. orn.* 243. *id. Syn.* iii. 46. *id. Sup.* i. 141.
- Le Merle ou Collier. *Belon av.* 318.
- Merula torquata*. *Gosner av.* 607.
- Merle alpestre. *Aldr. av.* ii. 282.
- Wil. orn.* 191. Rock or Mountain-Ouzel, 195.
- Raii syn. av.* 65.
- Mwyalchen* y graig. *Camden Brit.* 795.
- Le Merle a plastron blanc. 7. *Ring-Hut. d'ois.* iii. 340. *Pl. Ouzel. Ent.* 516.
- Le Merle a Collier. *Brisson av.* ii. 235.
- Morton Northampt.* 425.
- Turdus torquatus*. *Gm. Lin.* 832.
- Ringel-Amsel. *Frisch.* i. 30.
- Faun. Suec. sp.* 221.
- Scopoli, No.* 198.
- Dun.* Ringdrossel. *Norvegis* Ring Trost. *Br.* 237.
- Ringlamsel. *Kram.* 360.
- Br. Zool.* 92 plate P. 1. f. 1.
- Arct. Zool.* ii. 28.

THESE birds are superior in size to the *Description*. blackbird: their length is eleven inches; their breadth seventeen. The bill in some is wholly black, in others the upper half is yellow: on each side of the mouth are a few bristles: the head and whole upper part of the body are dusky, edged with pale brown: the quill feathers, and the tail are black. The coverts of the wings, the upper part of the breast, and the belly are dusky, slightly edged with ash-color. The middle of the breast is adorned

with a crescent, the horns of which point to the hind part of the neck; in some birds this is of a pure white, in others of a dirty hue. In the females and in young birds this mark is wanting, which gave occasion to some naturalists to form two species of them.

Ring-Ouzels inhabit the *Highland hills*, the north of *England*, and the mountains of *Wales*. They are also found to breed in *Dart-moor*, in *Devonshire*, in banks on the sides of streams. I have seen them in the same situation in *Wales*, very clamorous when disturbed.

They are observed by the Rev. Mr. *White*, of *Selborne*, near *Alton*, *Hants*, to visit his neighbourhood regularly twice a year, in flocks of twenty or thirty, about the middle of *April*, and again about *Michaelmas*. They make it only a resting place in their way to some other country: in their spring migration



that time. The place of their retreat is not known: those that breed in *Wales* and *Scotland* never quitting those countries. In the last they breed in the hills, but descend to the lower parts to feed on the berries of the mountain ash.

They migrate into *France* late in the season: and appear in small flocks about *Montbard*, in *Burgundy*, in the beginning of *October*, but seldom stay above two or three weeks. Notwithstanding this, they are said to breed in *Sologne* and the forest of *Orleans*.

GENUS XX. CHATTERER.

BILL strait, a little convex above, and bending towards the point: near the end of the lower mandible a small notch on each side.

NOSTRILS hid in bristles.

TOE middle connected at the base to the outmost.

1. *Waxey*. *Ampelis Garrulus*. *A. occi-* *av. ii 333. Hist. &ois.*
pite cristato, remigibus se- *iii. 429. Pl. Enl. 261.*
condariis apice membra- *Phil. Trans. No. 175.*
naceo colorato. Lath. ind. *Ampelis Garrulus. Gm. Lén.*
orn. 363. id. Syn. iii. 91. *838.*
Garrulus Bohemicus. Gesner *Siden-Suantz, Snotuppa.*
av. 703. *Faun. Succ. sp. 82.*
Aldr. av. i. 395. *Sieden vel Sieben Suands.*
Bohemian Chatterer. Wil. *Brunnich 25.*
orn. 133. *Zuserl, Geidenschweiff.*

CLASS II. WAXEN CHATTERER. 453

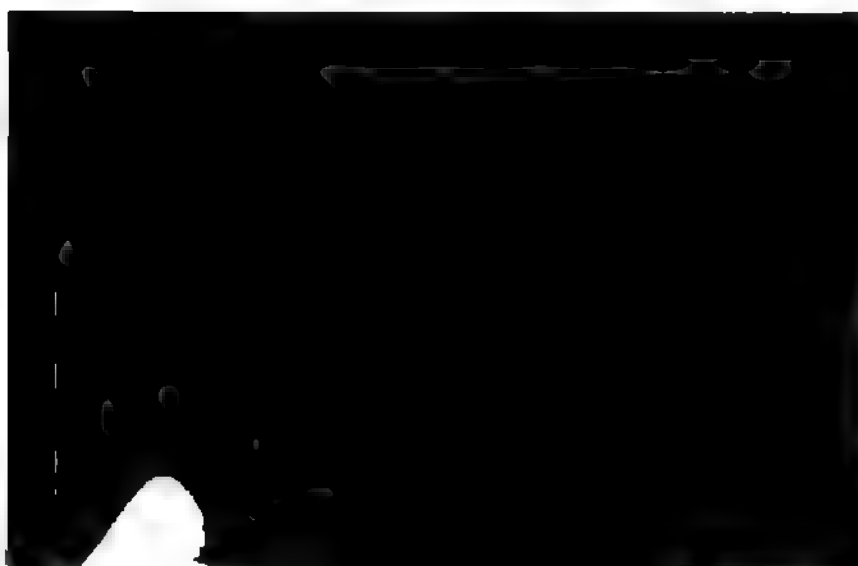
nually in *February*, and feed on the berries of the mountain ash: they also appear as far south as *Northumberland*, and like the fieldfare make the berries of the white thorn their food. That *Bohemia* is their native country is a mistake of past writers. They breed and pass their summer within the *Arctic* circle, from whence they disperse themselves (often in vast flocks) over many parts of *Europe*, but I believe not farther south than *Italy*. All retire north before the spring. One was killed at *Garthmeilio* in *Denbighshire*, in a fir-tree, during the severe frost of *December 1788*. They were once superstitiously considered as presages of a pestilence. They are gregarious; feed on grapes where vineyards are cultivated, and are esteemed delicious food; they are easily tamed.

The length of the bird I saw was eight *Description* inches. The bill was short, thick, and black; the base covered with black bristles; from thence a bar of black passes to the hind part of the head over each eye: on the head is a sharp pointed crest reclining backwards; the irides are of a bright ruby color; the cheeks tawny; the throat black, with a small bristly tuft in the middle. The head, crest, and back

454 WAXEN CHATTERER. Class II.

are ash-colored mixed with red: the rump of a fine cinereous color; breast and belly, pale chestnut dashed with a vinaceous cast; the vent feathers bright bay; the lower part of the tail black, the end of a rich yellow; the lesser coverts of the wings brown, the greater black tipped with white; the quill feathers black, the three first tipped with white; the six next have half an inch of their exterior margin edged with fine yellow, the interior with white; but what distinguishes this from all other birds are the horny appendages from the tips of seven of the secondary feathers of the color and gloss of the best red wax; some have one more or one less. The legs are black.

I think that the females want the yellow marks in the wings.



GENUS XXI. GROSBEAK.

BILL strong, thick, convex above and below.

NOSTRILS small and round.

TONGUE as if cut off at the end.

- | | | |
|---|--|----------------|
| <i>Loxia Coccothraustes.</i> L. | <i>Charlton ex.</i> 91. | 1. <i>Ham.</i> |
| cinereo-castanea, linea a- | Dieschk. <i>Scopoli.</i> No. 201. | |
| larum alba, remigibus me- | <i>Edw. av.</i> 188. The male. | |
| diis apice rhombeis, rec- | <i>Le Grosbec. Brisson av.</i> iii. | |
| tricibus latere tenuiore ba- | 219. <i>Hist. d'oï.</i> iii. 444. | |
| teos nigris. <i>Luth. ind. orn.</i> | <i>Pl. Enl.</i> 99, 100. | |
| 371. <i>id. Syn.</i> iii. 103. <i>id.</i> | <i>Loxia Coccothraustes. Gm.</i> | |
| <i>Sup.</i> i. 148. | <i>Lin.</i> 844. | |
| <i>Le Grosbec ou Pinson royal.</i> | <i>Stenckneck. Faun. Suec. sp.</i> | |
| <i>Belon av.</i> 373. | 222. | |
| <i>Coccothraustes (steinbesser)</i> | <i>Kernbeis, Nusbeisser. Kram.</i> | |
| <i>Gesner av.</i> 276. | 365. | |
| <i>Aldr. av.</i> ii. 289. | <i>Kirschfinch (Cherry-finch).</i> | |
| <i>Frosone. Olin.</i> 37. | <i>Frisch.</i> i. 4. | |
| <i>Grosbeak, or Hawfinch. Wil.</i> | <i>Brunnich. in append.</i> | |
| <i>orn.</i> 244. | <i>Br. Zool.</i> 105. plate U. <i>fig.</i> | |
| <i>Raii syn. av.</i> 85. | 1. <i>Arct. Zool.</i> ii. 40. | |

THE birds we describe were shot in *Shropshire*: they visit us only at uncertain times, and are not regularly migrant. They feed on berries, and even on the hardest kernels, such as those of cherries and almonds, which they crack with the greatest facility: their bills are well

adapted to that work, being remarkably thick and strong. Mr. *Willughby* tells us, they are common in *Germany* and *Italy*; that in the summer they live in woods, and breed in hollow trees, or in holes in the walls of churches, laying five or six eggs; but in the winter they come down into the plains.

Description. This species weighs nearly two ounces: its length is seven inches; the breadth thirteen. The bill is of a funnel shape, strong, thick, and of a dull pale pink color; at the base are some orange colored feathers: the irides are grey; the crown of the head and cheeks of a fine deep bay; the chin black; from the bill to the eyes is a black line; the breast and whole under side is of a dirty flesh color; the neck ash-colored; the back and coverts of the wings of a deep brown, those of the tail of a yellowish bay: the greater quill feathers are black, marked with white on their inner webs. The tail is short, spotted with white on the inner sides; the legs are of a flesh color.

The great particularity of this bird, and what distinguishes it from all others, is the form of the ends of the middle quill feathers; which Mr. *Edwards* justly compares to the figure of

some of the antient battle-axes: these feathers are glossed over with a rich blue; but are less conspicuous in the female: the head in that sex is of dull olive tinged with brown; it also wants the black spot under the chin.

It arrives in *Italy* at the end of *April*, and migrates in *October*.

- | | | |
|---|-------------------|---|
| <i>Loxia Enucleator.</i> | <i>L. sor-</i> | Tallbit, Natt-waka. <i>Faun. 2. Pine.</i> |
| <i>dide roseo fusco griseoque</i> | | <i>Succ. No. 233.</i> |
| <i>varia, linea alarum duplici</i> | | Greatest Bulfinch. <i>Edw. 123,</i> |
| <i>alba, rectricibus totis nigricantibus.</i> | <i>Luth. ind.</i> | <i>124. maz. et femina,</i> |
| <i>orn. 372. id Syn. iii. 111.</i> | | <i>Le Dur-bec, Coccothraustes</i> |
| <i>id. Sup. l. 148.</i> | | <i>Canadensis. Brisson av.</i> |
| <i>Loxia Enucleator. Gm. Lin.</i> | | <i>iii. 250. Hist. d'oie. iii.</i> |
| <i>845.</i> | | <i>457. Pl Enl. 135. f. 1.</i> |
| | | <i>Arct. Zool. ii. 33.</i> |

THESE are common to *Hudson's Bay*, *Sweden*, and *Scotland*. I have seen them flying above the great pine forests of *Invercauld*, in *Aberdeenshire*; and I imagine they breed there, for I saw them on the 5th of *August*. They feed on the seeds of the pine. *Linnaeus* says, they sing in the night.

They are nearly twice the size of the bul- *Description.*
finch, being nine inches and an half in length.

400 CROSS-BILLED GROSB. CLASS II.

and *Switzerland** they inhabit the pine forests, and breed in those trees as early as the months of *January* and *February*. They feed on the seeds of the cones of pines and firs, and are very dexterous in scaling them, for which purpose the cross structure of the lower mandible of their bill is admirably adapted: they feed also on hemp seed, and the pips or kernels of apples, and are said to divide an apple with one stroke of the bill to get at the contents. *Linnaeus*† says, that the upper mandible of this bird is moveable; but on examination we could not discover its structure to differ from that of others of the genus.

It is an undoubted fact, that these birds change their colors; or rather the shades of their colors: that is, the males which are red, vary at certain seasons to deep red, to orange, or to a sort of a yellow; the females which are green, alter to different varieties of the same color.

Cross-bills are rare in *Italy*. My friend, *John Strange, Esq.* informed me that they have appeared in flocks in *Tuscany* among the

* *Gesner* 59. *Kramer Elench* 355.

† *Faun. Suec. sp.* 224.

cypresses and pines, for the sake of the cones, a favorite food with them. The form of the bill astonished the peasants, to whom they were before quite unknown.

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|--|--|
| <i>Loxia Pyrrhula</i> . <i>L. cinerea</i> ,
artubus nigris, tectricibus
caudæ remigumque posti-
cærum albis. <i>Lath. ind.</i>
<i>orn.</i> 387. <i>id. Syn.</i> iii. 145.
<i>id. Sup.</i> i. 152. | <i>Le Bouvreuil</i> . <i>Brisson av.</i> 4. <i>Bulfinch</i> .
iii. 308. <i>Hist. d'oïis.</i> iv.
372. <i>Pl. Enl.</i> 145.
Monachino, Sufolotto. <i>Si-</i>
<i>nan.</i> 58.
<i>Loxia Pyrrhula</i> . <i>Gm. Lin.</i>
846. |
| <i>Le Pivoine</i> . <i>Belon av.</i> 539. | <i>Domherre</i> . <i>Faun. Succ. sp.</i>
225. |
| <i>Asprocolos</i> , <i>obs.</i> 13. | <i>Gimpl. Kram.</i> 365. <i>Gimpl.</i>
<i>Scopoli.</i> No. 202. |
| <i>Rubicilla</i> , sive <i>Pyrrhula</i> .
<i>Gesner av.</i> 733. | <i>Danis & Norvegis</i> <i>Dom-</i>
<i>pape, quibusdam Dom-</i>
<i>Herre.</i> <i>Br.</i> 240. |
| <i>Aldr.</i> <i>av.</i> ii. 326. | <i>Br. Zool.</i> 106. plate U. f. 3. |
| <i>Ciufolotto</i> . <i>Olini</i> , 40. | 4. <i>Arct. Zool.</i> ii. 39. |
| <i>Bulfinch</i> , <i>Alp.</i> or <i>Nope</i> . <i>Wil.</i>
<i>orn.</i> 247. | |
| <i>Rail syn.</i> <i>av.</i> 86. | |
| <i>Blutfluck</i> . <i>Frisch.</i> i. 2. | |

THE wild note of this bird is not in the least musical; but when tamed it becomes remarkably docile, and may be taught any tune after a pipe, or to whistle any notes in the justest manner: it seldom forgets what it has learned; and will become so tame as to come at call, perch on its master's shoulders, and

(at command) go through a difficult musical lesson. It may be taught to speak, and some thus instructed are annually brought to *London* from *Germany*.

Description. The male is distinguished from the female by the superior blackness of its crown, and by the rich crimson which adorns the cheeks, breast, belly, and throat of the male; those of the female being of a dirty color. The bill is black, short, and very thick; the head large; the hind part of the neck and the back grey; the coverts of the wings black; the lower crossed with a white line; the quill feathers dusky, but part of their inner webs white; the coverts of the tail and vent feathers white, the tail black.

In the spring these birds frequent our gardens, and are very destructive to fruit-trees, by eating the tender buds. They breed about the latter end of *May*, or beginning of *June*, and are seldom seen at that time near houses, as they chuse some very retired place to breed in. These birds are sometimes wholly black; I have heard of a male bulfinch which had changed its colors after it had been taken in full feather, and with all its fine tints. The

CLASS II. GREEN GROSBEAK. 463

first year it began to assume a dull hue, blackening every year, till in the fourth it attained the deepest degree of that color. This was communicated to me by the Reverend Mr. White of Selborne. Mr. Morton, in his History of Northamptonshire,* gives another instance of such a change, with this addition, that the year following, after moulting, the bird recovered its native colors. Bulfinches fed entirely on hemp-seed are aptest to undergo this change.

They for the most part winter in Italy.

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|---|--|
| Loxia Chloris. L. flavicanti- | Le Verdier. Brisson av. iii. 5. <i>Green.</i> |
| virens, remigibus primori- | 190. <i>Hist. d'ois.</i> iv. 172. |
| bis antice luteis, rectrici- | <i>Pl. Ent.</i> 267. f. 1. |
| bis lateralibus quatuor | Grindling. <i>Scopoli</i> , No. 206. |
| basi luteis. <i>Lath. ind. orn.</i> | Verdone, Verdoro, Antone. |
| 382. <i>id. Syn.</i> iii. 134. <i>id.</i> | <i>Zinn.</i> 63. |
| <i>Sup.</i> i. 152. | Laxia Chloris. <i>Gm. Lin.</i> 854. |
| Belon av. 365. | <i>Swenska. Faun. Suec. sp.</i> 226. |
| Assarandou. <i>obs.</i> 13. | <i>Svenske. Br.</i> 242. |
| Chloris. <i>Geener</i> av. 258. | Grunling. <i>Kram.</i> 368. |
| <i>Aldr.</i> av. ii. 371. | Grunfinck (Greenfinch) |
| <i>Ollina</i> , 26. | <i>Frisch.</i> i. 2. |
| <i>Wil. orn.</i> 246. | <i>Br. Zool.</i> 107. <i>Arct. Zool.</i> |
| <i>Rati syn.</i> av. 85. | ii. 39. |

THE head and back of this bird are of a yel- *Description*

lowish green; the edges of the feathers are grey; the rump more yellow; the breast of the same color; the lower belly white; the edges of the outmost quill feathers are yellow, the next green, the farthest grey. The tail is a little forked; the two middle feathers are wholly dusky; the exterior webs of the four outmost feathers on both sides the tail are yellow. The colors in the female are much less vivid than in the male.

Nest. These birds are very common in this island; they make their nest in hedges; the outside is composed of hay or stubble, the middle part of moss, the inside of feathers, wool, and hair. They lay five or six eggs of a pale green color, marked with blood colored spots. During breeding-time, that bird which is not engaged in incubation, or nutrition, has a pretty way of sporting on wing over the bush.

Their native note has nothing musical in it; but a late writer on singing-birds says, they may be taught to pipe or whistle in imitation of other birds. The Green Grosbeak is so easily tamed, that it frequently eats out of the hand five minutes after it is taken, if there is an opportunity of carrying it into the dark;

the bird first should be put upon the finger, which it does not attempt to move from (as being in darkness it does not know where to fly); the finger of the other hand should then be introduced under its breast, which making it inconvenient to stay where it was before placed, it climbs upon the second finger, where it likewise continues, and for the same reason, When this hath been nine or ten times repeated, and the bird stroked and caressed, it finds that no harm is intended, and if the light is let in by degrees, it will very frequently eat any bruised seed out of the hand, and afterwards continue tame.

GENUS XXII. BUNTING.

BILL strong and conic, the sides of each mandible bending inwards: in the roof of the upper, a hard knob, of use to break and comminute hard seeds.

1. *Common.* *Emberiza Miliaria.* *E. grisea*, subtus nigro-maculata, orbitis rufis. *Lath. ind. orn.* 402. *id. Syn.* iii. 171. *Le Proyer, Prier, ou Pruyer.* *Belon av.* 266. *Emberiza alba.* *Gesner av.* 654. *Aldr. av.* ii. 264. *Strillozzo.* *Olina*, 41. *Wil. orn.* 267. *Rau syn av.* 93. *Le Proyer, Cynchramus.* *Brissson av.* iii. 292. *Hist.* *d'ois.* iv. 355. *Pl. Enl.* 233. *Petrone, Capparone, Star. dachio Zinan.* 68. *Emberiza Miliaria.* *Gm. Lin.* 868. *Faun. Suec. sp.* 228. *Korn Larkor.* *Lin. id. scan.* 292. *tab.* 4. *Cimbria Korn-Lærke.* *Nor. veg. Kuotter.* *Brunnich* 247. *Graue Ammer. Frisch.* i. 6. *Brash r.* *Kram.* 372. *Br. Zool.* 111 plate W. f. 7. *Arct. Zool.* ii. 54.

Description **T**HE bill of this bird, and of the other species of this genus, is singularly constructed; the sides of the upper mandible forming a sharp angle, bending inwards towards the lower; in

the roof of the former is a hard knob, adapted to bruise corn or other hard seeds.

The throat, breast, sides, and belly are of a yellowish white; the head and upper part of the body of a pale brown, tinged with olive; each of which (except the belly) are marked with oblong black spots; towards the rump the spots grow fainter. The quail feathers are dusky, their exterior edges of a pale yellow. The tail is a little forked, of a dusky hue, edged with white; the legs are of a pale yellow.

This bird resides with us the whole year, and during winter collects in flocks.

I received in *November, 1787*, a Bunting with a white head and tail; the head elegantly tinged with yellow; the back white and brown; the coverts of the wings the same, but on both the white predominated; the breast had all the usual marks of the Bunting.

2. *Yellow.* *Emberiza Citrinella.* E. rec. *Yellow Hammer. Raii syn.*
tucibus nigricantibus, ex- *av. 93.*
timis duabus latere interi- *Le Bruant. Brisson av. iii.*
ore macula alba acuta. *258. Hist. d'oïis. iv. 342.*
Lath ind. orn. 400. id. *Pl. Enl. 30. f. 1.*
Syn. iii. 170. id. Sup. i. *Sternardt. Scopoli. No.*
157. *209.*
Belon av. 366. *Emberiza Citrinella. Gm.*
Emberiza flava. Gesner av. *Lin. 870.*
653.
Cia pagglla riccia, Lutetæ al- *Groning, Golspink. Faun.*
terum genus. Aldr. av. ii. *Succ. sp. 230.*
372. *Ammering, Goldammering.*
Wil. orn. 268 *Krum. 370. Frisch. i. 5.*
Arct. Zool. ii. 55.

Nest.

THIS species makes a large flat nest on the ground, near or under a bush or hedge; the materials are moss, dried roots, and horse hair interwoven. It lays six eggs of a white color, veined with a dark purple: is extremely common, and in winter frequents our farm yards with other small birds.

Description.

The bill is of a dusky hue; the crown of the head is of a pleasant pale yellow, in some almost plain, in others spotted with brown; the hind part of the neck is tinged with green; the chin and throat are yellow; the breast is marked with an orange red; the belly yellow;

the lesser coverts of the wings are green; the others dusky, edged with rust color; the back of the same colors; the rump of a rusty red; the quill feathers dusky, their exterior sides edged with yellowish green; the tail is a little forked; the middle feathers are brown; the two middlemost edged on both sides with green; the others on their exterior sides only: the interior sides of the two outmost feathers are marked obliquely near their ends with white.

It visits *Italy* the end of *April*, and quits it in *October*, but many winter there.

3. *Cirl*.

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| [<i>Emberiza Cirlus</i> . <i>E. supra</i> | <i>Luteæ primum genus. Raii</i> |
| <i>varia, subtus lutea, pecto-</i> | <i>syn. av. 93.</i> |
| <i>re maculato, superciliis lu-</i> | <i>Le Bruant de Haye. Embe-</i> |
| <i>teis, rectricibus duabus</i> | <i>riza sepioria, Brisson av.</i> |
| <i>extimis macula alba cune-</i> | <i>iii. 263. Hist. d'oï. iv 347.</i> |
| <i>ata. Lath. ind. orn. 401.</i> | <i>Pl. Enl. 653. f. 1. 2.</i> |
| <i>id. Syn. iii. 190.</i> | <i>Bunting Cirl. Montagu. orn.</i> |
| <i>E. Cirlus. Gm. Lin. ii. 879.</i> | <i>diet. id. Lin. Tr. vii. 276.</i> |

THIS species is added to the *British* birds by the accurate ornithologist, *George Montagu*, esq. who discovered it in *Devonshire*, in the year 1800, amongst flocks of yellow bunti-

and chaffinches; and afterwards found its nest, with four eggs, in the stump of an old tree.

Description. It is thus accurately described by Dr. Latham. "Size of a yellow-hammer; length six inches and a quarter; bill cinereous brown; the head olive-green, with a dusky line down the shaft of each feather; side of the head yellow, with a dash of black between the bill and eye, and some markings of black on the ears; the chin is also black, passing a little backwards; the hind part of the neck, back, and rump, brown; the feathers dusky in the middle; the under parts from the chin are yellow; the breast inclining to brown, and a few dusky streaks on the sides of the body; across the throat a yellow band; the tail is brown, edged with grey, the outer feather with white; and has also a spot of white on the inner web for half the length; the outermost but one has also a spot of white on the same place, but of a much smaller size; the shape a little forked; the legs yellowish.

The female is not unlike the male on the upper parts; the under are yellow streaked with dusky and inclining to white at the chin and vent; in some the breast inclines to green."

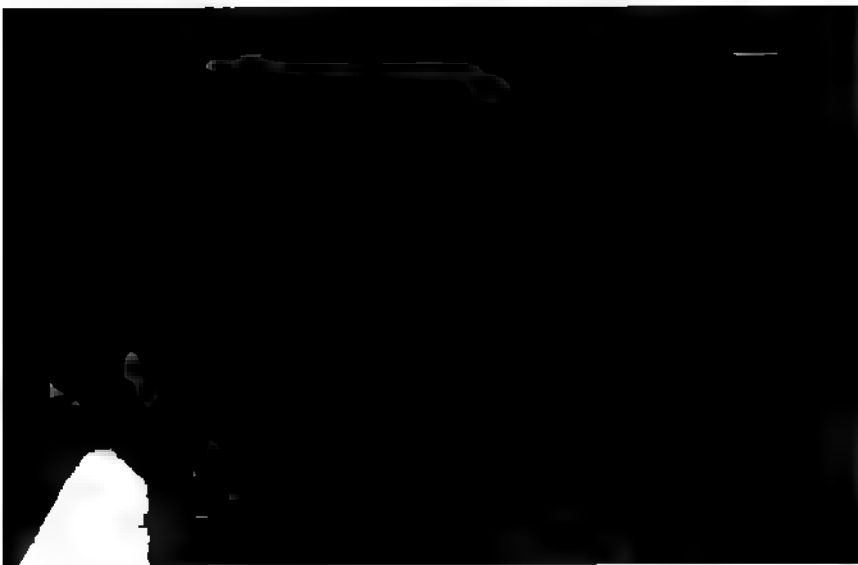
Emberiza Schœnielus. E. ca-
 te nigro, corpore griseo
 nigroque, rectricibus exte-
 ris macula alba cuneifor-
 m. *Lath. ind. orn.* 402.
J. Syn. iii. 173. *id. Sup.*
 157.
œnielus. *Gesner av.* 573.
 52.
J. orn. 269.
 d Sparrow. *Rail syn. av.*
 5.
 Nettle-monger. *Morton*
Vorthampt. 428.

Ror. Spurr. *Brunnich* 251, 4. *Reed.*
 L'Ortolan de Roseaux, Hor.
tulanus arundinaceus.
Brisson av. iii. 274. *Hist.*
d'ois. iv. 315. *Pl. Enl.*
 247. f. 2. 477.
Emberiza Schœnielus. Gm.
Lin. 881.
Saf. sparf. Faun. Suec. sp.
 231.
 Rohammering, Meerspatz.
Kram. 371.
 Rohammer (Reed-hammer)
Frisch. i 7.
Br. Zool. 112 plate W.

THE reed bunting inhabits marshy places,
 at commonly among reeds; from which it
 takes its name.

In the male, the head, chin, and throat, are *Description*
 black; the tongue livid: at each corner of the
 mouth commences a white ring, which en-
 circles the head. At the approach of winter
 the head changes to hoary, but on the return
 of spring resumes its pristine jettyness. The
 whole under side of the body is white. The
 back, coverts of the wings, and the scapular
 feathers are black, deeply bordered with red;

the two middle feathers of the tail are of the same colors; the three next black; the exterior web, and part of the interior of the outmost feather is white. The head of the female is rust-colored, spotted with black; it wants the white ring round the neck: but in most other respects resembles the male.



- Emberiza glacialis*. *E. nigra*,
pennis flavo-fusco margi-
nata, gula uropygioque fla-
vescentibus, subtus alba
flavo obscure maculata.
Lath. ind. orn. 398. *id.*
Syn. iii. 164.
- Great pied Mountain Finch,
or Brambling. *Wil. orn.*
255.
- Emberiza mustelina*. *Gm.*
Lin. 867.
- Rati syn.* av. 88.
- L'Ortolan de Neige, Hor-
tulanus nivalis. *Brisson*
av. iii. 285. *Hist. d'ois.*
iv. 329 *Pl. Enl.* 497.
- Schnee-ammer (snow-ham-
mer) *Frisch.* i. 6.
- Tawny Bunting. *Br. Zool.*
ed. 4to i. 278. *Br. Zool.*
112 plate v. f. 6. *Arct.*
Zool. ii. 41.
- Emberiza nivalis*. *E. remi-*
gibus albis, primoribus ex-
trorsum nigris, rectricibus 5. *Tawny.*
nigris, lateralibus tribus
albis. *Lath. ind. orn.* 397.
id. Syn. iii. 161. *id. Sup.*
i. 157.
- Emberiza nivalis*. *Gm. Lin.*
866.
- Snosparf. *Faun. Suec. No.*
227.
- Le Pincon de neige ou la
nive rade. *Brisson* iii. 162.
Cimbris, Sneekok, vinter
fugl *Norvegis* Sneefugl,
Fialster. *Brunnich* 245.
- Avis ignota a *Piperino* mis-
sa. *Gesner* av. 798.
- Scopoli.* No. 214.
- Snow-bird *Edw.* 126. *Egede*
Greenl. 64. *Marten's*
Sputzbergen, 73
- Forster in Ph. Tr.* vol. lxii.
p. 493.
- Snow Bunting. *Br. Zool.*
4to. i. 279.

THE weight of this bird is rather more than *Description.*
an ounce; the length is six inches three quar-
ters; the breadth twelve inches three quarters.
The bill is very short; yellow, except at the
point, which is black; the crown of the head
is tawny, darkest near the forehead; the whole

neck is of the same color, but paler; the throat almost white; the upper part of the breast is of a dull yellow; the belly and whole under part of the body white, dashed with a yellowish tinge. The back and scapular feathers are black, edged with a pale reddish brown: the rump and covert feathers of the tail are white on their lower half, on their upper, yellow. The tail consists of twelve feathers, and is a little forked: the three exterior feathers are white; the two outmost marked with a dusky spot on the exterior side; the third is marked with the same color on both sides the tip; the rest of the tail feathers are entirely dusky. The wings, when closed, reach to about the middle of the tail; the color, of as much of the six first quill feathers as appears in view, is dusky, slightly tipped with a reddish white, their lower part on both sides white; in the seven succeeding feathers the dusky color gradually gives place to the white, which in the seventh of these possesses the whole feather, except a small spot on the exterior upper side of each; the two next are wholly white; the rest of the quill feathers and the scapular feathers are black, edged with a pale red: the

bastard wing, and the outmost secondary feathers are of the same color with the quill feathers; the rest of them, together with the coverts, are entirely white, forming one large bed of white. The legs, feet and claws are black; the hind toe is very long, like that of a lark, but not so strait.

This is their summer dress. Against the rigorous season, they become white on their head, neck, and whole under side: great part of their wings and the rump assume the same color; but the back and middle feathers of the tail remain black: *Linnaeus*, who was well acquainted with the species, says that they vary according to age and season. In this state they are called in *Scotland*, Snowflakes, from their appearance in hard weather and in deep snows. They arrive in that season among the *Cheviot* hills, and in the *Highlands* in amazing flocks. A few breed in the last on the summit of the highest hills in the same places with the *Ptarmigans*; but the greatest numbers migrate from the extreme north. They first appear in the *Shetland* islands, then in the *Orkneys*, and multitudes of them often fall, wearied with their flight, on vessels in the *Pentland Firth*.

*Snow
Bunting.*

Their appearance is a certain fore-runner of hard weather, and storms of snow, being driven by the cold from their common retreats. Their progress southward is probably thus; *Spitzbergen* and *Greenland*, *Hudson's Bay*, the *Lapland Alps*, *Scandinavia*, *Iceland*, the *Ferroe isles*, *Shetland*, *Orknies*, *Scotland*, and the *Cheviot hills*. They visit at that season all parts of the northern hemisphere, *Prussia*, *Austria*, and *Siberia*.^{*} They arrive lean and return fat. In *Austria* they are caught and fed with millet, and, like the *Ortolan*, grow excessively fat. In their flights, they keep very close to each other, mingle most confusedly together; and fling themselves collectively into the form of a ball, at which instant the fowler makes great havoc among them.

^{*} *Kram. Austria*, 372. *Bell's Travels*, i. 198.

CLASS II. MOUNTAIN BUNTING. 477

Emberiza montana. E. cinerea subtus flavescens-undulata, capite castaneo, fronte saturiore, gula alba, rectricibus tribus extimis albis. <i>Lath ind. orn.</i>	Emberiza Montana. <i>Gm. 6. Mountain.</i> <i>Lin 867.</i> Lesser Mountain-finch, or Brambling. <i>Wil. orn. 255.</i> <i>Morton Northampt. 423.</i> <i>tab. 13 fig. 3.</i> <i>Br. Zool. 113.</i>
398. <i>id. Syn. iii. 165.</i>	

WE are obliged to borrow the following description from the account of Mr. *Johnson* transmitted to Mr. *Ray*; having never seen the bird. Mr. *Ray* suspected that it was only a variety of the Tawny Bunting, but Mr. *Morton*, having frequent opportunity of examining this species, proves it to be a distinct kind.

According to Mr. *Johnson*, its bill is short, *Description.* thick, and strong; black at the point, the rest yellow. The forehead is of a dark chesnut; the hind part of the head and cheeks of a lighter; the hind part of the neck, and the back are ash-colored; the latter more spotted with black; the throat is white; the breast and belly waved with flame color; at the setting on of the wing, grey; the first five feathers of

428 MOUNTAIN BUNTING. *Cyanus*

the wing are of a blackish brown, the rest white with the point of each dashed with brown; the three outmost feathers of the tail are white, the rest dark brown; the feet black; the hind claw as long again as any of the rest. The breast of the female is of a darker color than that of the male. The species, by the above-mentioned writer's account, is found in *Yorkshire* and *Northamptonshire*.



GENUS XXIII. FINCH.

BILL perfectly conic, slender towards the end,
and sharp-pointed.

- Fringilla Carduelis*. Fr. remigibus antrorsum luteis, extima immaculata, rectricibus duabus, extimis medio reliquisque apice albis. *Le Chardonneret. Brisson 1. Gold. av. iii. 53. Hist. d'ois. iv. 187. Pl. Enl. 4. f. 1. Cardellino. Zinck. 59. Fringilla Carduelis. Gm. Lath. ind. orn. 449. id. Lin. 903. Syn. iii. 281. Stiglitz. Faun. Suec. sp. Belon av. 353. 236. Carduelis. Gesner av. 242. Stiglitz. Br. 257. Scopoli, Aldr. av. ii. 349. No. 211. Cardelli. Olina, 10. Stiglitz. Kram. 365. Distelfinck. Frisch. i. 1. Goldfinch, or Thistlefinch. Br. Zool. 108. plate V. f. 1. Wil orn. 256. Arct. Zool. ii. 73. Raii syn. av. 89.*

THIS is the most beautiful of our hard billed *Description* small birds; whether we consider its colors, the elegance of its form, or the music of its note. The bill is white, tipped with black, the base surrounded with a ring of rich scarlet feathers: from the corners of the mouth to the eyes is a black line; the cheeks are white; the top of the head black, and the white on the

cheeks is bounded almost to the forepart of the neck with black; the hind part of the head is white; the back, rump, and breast, are of a fine pale tawny brown, lightest on the two last: the belly is white; the covert feathers of the wings, in the male, are black: the quill feathers black, marked in their middle with a beautiful yellow; the tips white: the tail is black, but most of the feathers marked near their ends with a white spot: the legs are white.

Female. The female is thus distinguished from the male: the feathers at the end of the bill are brown; those in the male black: the lesser coverts of the wings are brown; and the black and yellow in the wings are less brilliant. The young bird, before it moults, is grey on the head; and hence it is termed by the bird-catchers a *grey pate*.

Their note is very sweet, and they are much esteemed on that account, as well as for their great docility. Towards winter they assemble in flocks, and feed on seeds of different kinds, particularly those of the thistle. They are fond of orchards; and frequently build in an apple or pear tree: their nest is very elegantly

formed of fine moss, liver-worts, and bents on the outside; lined first with wool and hair, and then with the goslin or cotton of the swallow. They lay five white eggs, marked with deep purple spots on the upper end.

This bird seems to have been the *χρυσολιγίς** of Aristotle; being the only one that we know of, that could be distinguished by a golden fillet round its head, feeding on the seeds of prickly plants. The very ingenious translator† of Virgil's eclogues and georgics, gives the name of this bird to the *aculanthis* or *acanthis*:

Littoraeus alcyonen resonant, acanthida dumoi.

In our account of the *Halcyon* of the ancients, p. 191 of the former edition, we followed his opinion; but having since met with a passage in Aristotle that clearly proves that *acanthis* could not be used in that sense, we beg, that, till we can discover what it really is, the word may be rendered linnæ†; since it is impossible the philosopher could distinguish a bird of such striking and brilliant colors as the

* Which he places among the *ἀναδωφάνα*. Scaliger reads the word *χρυσολιγίς*, which has no meaning; neither does the critic support his alteration with any reasons. *Hist. an.* 887.

† Dr. Martyn.

goldfinch, by the epithet *κακοχρως*, or bad colored; and as he celebrates his *acanthis* for a fine note, *φωνη μὲν τῇ λευκῇ ἔχουσι*,* both characters will suit the linnet, being a bird as remarkable for the sweetness of its note, as for the plainness of its plumage.

The Goldfinch comes into *Italy* in *April*, builds in rocks, and migrates in *October* and *November*.

Var. A. There is a variety of goldfinch, which is, perhaps, not taken above once in two or three years, which is called by the *London* bird-catchers a *cheverel*, from the manner in which it concludes its *jerk*: when this sort is taken, it sells at a very high price: it is distinguished from the common sort by a white streak, or by two, and sometimes three white spots under the throat.



- Fringilla Cælebs*. Fr. artubus nigris, remigibus utrinque albis, tribus primis immaculatis, rectricibus duabus oblique albis. *Lath. ind. orn.* 437. *id. Syn.* iii. 257. *id. Sup.* i. 165.
- Le Pinçon. *Brissou av.* iii. 2. *Chaffinch.* 148. *Hist. d'oïis.* iv. 109. *Pl. Ent.* 54. f. 1.
- Schinkovitz. *Scopoli. No.* 217.
- Fringilla cælebs*. *Gm. Lin.* 901.
- Flucke, Bofincke. *Faun. Suec. sp.* 232.
- Buchfinck (Beachfinch) *Frisch.* i. 1.
- Finke. *Kram.* 367.
- Bofincke. *Br.* 253.
- Br. Zool.* 108. plate V. f. 2.
3. *Arct. Zool.* ii. 71.
- Aldr. av.* ii. 356.
- Olin.* 31.
- Wil. orn.* 253.
- Rati syn. av.* 88.
- Fringuello. Zinan.* 61.

THIS species entertains us agreeably with its song very early in the year, but towards the latter end of summer assumes a chirping note: both sexes continue with us the whole year. What is very singular in Sweden, the females quit the country in September, migrating in flocks into Holland, leaving their mates behind; in the spring they return.* In Hampshire M. White has observed something of this kind; namely, vast flocks of females with

* *Amen. acad.* ii. 42. iv. 595.

scarcely any males among them. Their nest is almost as elegantly constructed as that of the goldfinch, and of much the same materials, only the inside has the addition of some large feathers. They lay four or five eggs, of a dull white color, tinged and spotted with deep purple.

Description. The bill is of a pale blue, the tip black; the feathers on the forehead black; the crown of the head, the hind part and the sides of the neck, are of a bluish grey; the space above the eyes, the cheeks, throat, and forepart of the neck, are red; the sides and belly white, tinged with red; the upper part of the back is of a deep tawny color; the lower part and rump green; the coverts on the very ridge of the wing black and grey; beneath them is a large white spot; the bastard wing and first greater coverts black, the rest tipped with white; the quill feathers black; their exterior sides edged with pale yellow; their inner and outward webs white on their lower part, so as to form a third white line across the wing; the tail is black, except the outmost feather, which is marked obliquely with a white line from top to bottom, and the next which has a white

CLASS II. BRAMBLING FINCH. 485

spot on the end of the inner web; the legs are dusky. The colors of the female are very dull; it entirely wants the red on the breast and other parts: the head and upper part of the body are of a dirty green; and the belly and breast of a dirty white; the wings and tail marked much like those of the male.

It arrives in *Italy* in *April*, and departs in *October*; but many winter there.

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|--|---|
| <i>Fringilla montifringilla</i> . Fr. | <i>Le Pinçon d'Ardenne</i> . 3. <i>Bramb.</i> |
| <i>nigra</i> penais rufo margi- | <i>Brisson</i> av. iii. 155. <i>Hist. ling.</i> |
| <i>natis</i> , subtus uropygioque | <i>d'ois</i> . iv. 124. <i>Pl. Ent.</i> |
| <i>alba</i> , jugulo pectoreque | 54. f. 2. |
| <i>rufescentibus</i> , rectricibus | <i>Fringilla Montifringilla</i> . |
| <i>lateralibus nigricantibus</i> , | <i>Gm. Lin.</i> 902. |
| <i>extus albo marginatis</i> . | <i>Pinosch. Scopoli</i> , No. 218. |
| <i>Lath. ind. orn.</i> 439. <i>id.</i> | <i>Norquint. Faun. Suec. sp.</i> |
| <i>Syn.</i> iii. 261. | 233. |
| <i>Le Montain. Belon</i> av. 372. | <i>Querker, Bosinkens Hore.</i> |
| <i>Montifringilla montana</i> . | <i>Unge, Akerlan. Brun-</i> |
| <i>Geener</i> av. 388. | <i>nich</i> 255. |
| <i>Aldr.</i> av. ii. 358. | <i>Nicowitz, Mecker, Pienck-</i> |
| <i>Fringuella montanina. Olin,</i> | <i>en. Kram.</i> 367. |
| 32. | <i>Bergfinck (Mountainfinch).</i> |
| <i>Bramble, or Brambling. Wil.</i> | <i>Frisch.</i> i. 3. |
| <i>orn.</i> 254. | <i>Br. Zool.</i> 108. plate V. f. |
| <i>Mountain-finch. Raii syn.</i> av. 88. | 4. <i>Arct. Zool.</i> ii. 71. |

THIS bird is not very common in these *Descriptions*.

islands. It is superior in size to the chaffinch : the top of the head is of a glossy black, slightly edged with a yellowish brown ; the feathers of the back are of the same colors, but the edges more deeply bordered with brown ; the chin, throat, and breast, are of an orange color ; the lesser coverts of the wings of the same color, but those incumbent on the quill feathers barred with black, tipped with orange ; the finer coverts at the base of the wings are of a fine yellow ; the quill feathers are dusky ; but their exterior sides edged with yellow ; the tail is a little forked ; the exterior web of the outmost feather is white, the others black, except the two middle, which are edged and tipped with ash color.

It migrates in *Italy*, and takes its departure later than the chaffinch.

- Fringilla domestica*. Fr. re-
 migibus rectricibusque
 fuscis, corpore griseo ni-
 groque, fascia alarum alba
 solitaria. *Lath. ind. orn.*
 432. *id. Syn.* iii. 248. *id.*
Sup. 163.
- Le Moineau, Paise, ou
 Moisson. *Belon av.* 361.
- Passer*. *Gesner av.* 643.
- Passera nostrale*. *Olini*, 42.
- The House-sparrow. *Wil.*
orn. 249.
- Raii syn.* av. 86.
- Le Moineau franc. *Brisson*
av. iii. 72. *Hist. d'ois.* iii.
 474. *Pl. Enl.* 6, f. 1. 55.
 f. 1.
- Fringilla domestica*. *Gm.*
Lin. 925.
- Tatting, Grasparf. *Faun.*
Succ. sp. 242.
- Danis Graae-Spurre*. *Nor-*
veg Huus-Kald. Br. 264.
- Hauspatz. *Kram.* 369.
- Grabetz. *Scopoli*, No. 220.
Br. Zool. ii. 300. *Arct.*
Zool. ii. 73.
4. Sparrow.

THE bill of the male is black; the crown *Description*
 of the head grey; under each eye is a black
 spot, and above the corner a broad bright bay
 mark, which surrounds the hind part of the
 head; the cheeks are white; the chin and
 under side of the neck are black; the latter
 edged with white; the belly of a dirty white;
 the lesser coverts of the wings are of a bright
 bay; the last row black, tipped with white; the
 great coverts black, outwardly edged with
 red; the quill feathers the same; the back
 spotted with red and black; the tail dusky.

The lower mandible of the bill of the female is white; beyond each eye is a line of white; the head and whole upper part are brown, only on the back are a few black spots; the black and white marks on the wings are obscure; the lower side of the body is a dirty white.

Sparrows are proverbially salacious; they breed early in the spring, make their nests under the eaves of houses, in holes of walls, and very often in the nests of the martin, after expelling the owner. *Linneus* tells us (a tale from *Albertus Magnus*) that this insult does not pass unrevenged; the injured martin assembles its companions, who assist in plaistering up the entrance with dirt; then fly away, twittering in triumph, and leave the invader to perish miserably. They will often breed in plum-trees and apple-trees, in old rooks' nests, and in the forks of boughs beneath them.

They remain in *Italy* the whole year, and breed thrice.

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| <p><i>Fringilla montana</i>. Fr. remi-
gibus rectricibusque fuscis,
corpore griseo nigroque,
alarum fascia alba gemma.
<i>Lath. ind. orn.</i> 433. <i>id.</i>
<i>Syn.</i> iii. 252. <i>id.</i> <i>Sup.</i> i.
163.</p> <p><i>Passerious</i>. <i>Gesner av.</i> 656.
<i>Aldr.</i> av. ii. 261.
<i>Olin.</i> 48.
<i>Wil. orn.</i> 252.
<i>Rail syn.</i> av. 87.
<i>Edx.</i> av. 269.
Le Moineau de Montagne,</p> | <p><i>Passer montanus</i>. <i>Bris- 5. Tree</i>
<i>son av.</i> iii. 79. <i>Sparrow.</i></p> <p><i>Le Friquet. Hist. d'oie.</i> 489.
<i>Pt. Ent.</i> 267. f. 1.
<i>Passere Montano Zinn.</i> 81.
<i>Fringilla montano. Gm.</i>
<i>Lin.</i> 925.</p> <p><i>Faun. Suec. sp.</i> 243.
<i>Scopoli, No.</i> 221.
<i>Skov-Spurre. Brunnich</i> 267.
<i>Feld-pa'z, Rohrspatz,</i>
<i>Kram</i> 370. <i>Frisch.</i> i. 1.
<i>Br. Zool.</i> 109. <i>Arct. Zool.</i>
ii. 68.</p> |
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THIS species is inferior in size to the com- *Description.*
mon sparrow. The bill is thick and black; the
crown of the head, hind part of the neck, and
the lesser coverts of the wings are of a bright
bay; the two first plain, the last spotted with
black; the chin black; the cheeks and sides of
the head white, marked with a great black
spot beneath each ear; the breast and belly of
a dirty white; just above the greater coverts is
a row of feathers black edged with white; the
greater coverts are black edged with rust
color; the quill feathers dusky, edged

pale red; the lower part of the back of an olive brown; the tail brown; the legs straw color.

These birds are very common in *Lincolnshire*; are conversant among trees, and collect like the common kind in great flocks.

They winter in *Italy*.

- G. Siskin.** *Fringilla Spinus*. Fr. remigibus medio luteis, primis quatuor immaculatis, rectricibus basi flavis apice nigris. *Lath. ind. orn.* 452. *id. Syn.* iii. 289. *id. Sup.* i. 166.
Belon av. 534.
Acanthis, Spinus, Ligurius. *Gesner av.* 1.
Aldr. av. ii. 352.
Lucarino. Olina, 17.
Wil. orn. 261.
Rait syn. av. 91.
- LeSerin. Brisson av.* iii. 65.
Le Tatin. Hist. d'ois. iv. 221. *Pl. Enl.* 483. f. 3.
Fringilla Spinus. Gm. Lin. 914.
Siska, Groniska. Faun. Suec. sp. 237.
Sisgen. Brunnich, 261.
Zeisel, Zeiserl. Kram. 366.
Frisch. i. 2. Scopoli. No. 212.
Br. Zool. 109. plate V.
Arct. Zool. ii. 74.

Description **T**HE head of the male is black; the neck and back green; but the shafts on the latter are black; the rump is of a greenish yellow; the throat and breast the same; the belly white; the vent-feathers yellowish, marked with oblong dusky spots in the middle; the

pinion quill feather is dusky edged with green; the outward webs of the nine next quill feathers are green; the green part is widened by degrees in every feather, till in the last it takes up half the length; from the tenth almost the lower half of each feather is yellow, the upper black; the exterior coverts of the wings are black; the two middle feathers of the tail are black; the rest above half way are of a most lovely yellow, with black tips. The colors of the female are paler; her throat and sides are white spotted with brown; the head and back are of a greenish ash-color, marked also with brown.

Mr. Willughby tells us, that this is a song bird: that in *Sussex* it is called the *barley-bird*, because it comes to them in barley-seed time. We are informed that it visits these islands at very uncertain periods, like the grosbeak, &c. It is to be met with in the bird shops in *London*, and being rather a scarce bird, sells at a higher price than the merit of its song deserves: it is known there by the name of the *Aberdavine*. The bird catchers have a notion that it comes out of *Russia*. Dr. Kramer* in-

* *Kramer elench* 366.

forms us, that it conceals its nest with great art, and that no one could discover it, though there are infinite numbers of young birds in the woods on the banks of the *Danube*, that seem just to have taken flight.

In *Italy* it builds its nest in the highest woods of the *Alps*, and migrates in flocks in *October*.

7. *Linnet*. *Fringilla Linota*. Fr. fusco-castanea, subtus albida, fascia alarum longitudinali alba, rectricibus nigris, marginibus undique albis. *Lath. ind. orn.* 457. *id. Syn.* iii. 302. *Fringilla Linota*. Gm. *Lin.* 916. *Belon av.* 356. *Linaria*, Henfling, Schofzling, Flacklin. *Germer av.* 590. *Henfling. Frisch.* i. 9. *Aldr av.* ii. 359. *Wil. orn.* 258. *Raii syn.* av. 90. *Fanello, Zinn.* 61. *La Linotte. Brisson av.* iii. 131. *Hist. d'ois.* iv. 58. *Pl. Ent* 151, f. 1. *Br. Zool.* 110.

Description. **T**HE bill of this species is dusky, but in the spring assumes a bluish cast; the feathers on the head are black edged with ash-color; the sides of the neck deep ash-color; the throat marked in the middle with a brown line, bounded on each side with a white one; the

back black bordered with reddish brown; the bottom of the breast is of a fine blood red, which heightens in color as the spring advances; the belly white; the vent feathers yellowish; the sides under the wings spotted with brown; the quill feathers are dusky; the lower part of the nine first are white; the coverts incumbent on them black; the others of a reddish brown; the lowest order tipped with a paler color; the tail is a little forked, of a brown color, edged with white; the two middle feathers excepted, which are bordered with dull red. The females and young birds want the red spot on the breast; in lieu of that, their breasts are marked with short streaks of brown pointing downwards; the females have also less white in their wings.

These birds are much esteemed for their song; they feed on seeds of different kinds, which they peel before they eat; the seed of the *linum* or flax is their favorite food, from whence the name of the linnet tribe.

They breed among furze and white thorn; the outside of their nest is made with moss and bents, and lined with wool and hair. T

494 RED HEADED FINCH. CLASS II.

lay five whitish eggs, spotted like those of the goldfinch.

8. Red headed.

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| <i>Fringilla cannabina</i> . Fr. fusco-castanea, subtus alborufescens, fascia alarum longitudinali alba, macula verticis pectoreque rubris. | <i>Brisson</i> av. iii. 135. <i>Hist. d'ois.</i> iv. 58. <i>Pl. Ent.</i> 485. f. 1. |
| <i>Lath. ind. orn.</i> 458. <i>id.</i> <i>Syn.</i> iii. 304. <i>id.</i> <i>Sup.</i> i. 167. <i>id.</i> <i>Sup.</i> ii. 209. | <i>Fringilla cannabina</i> . <i>Gm. Lin.</i> 916. <i>Scopoli</i> , No. 219. <i>Hampling. Faun. Succ. sp.</i> 240. |
| <i>Linaria rubra</i> . <i>Gesner</i> av. 591. | <i>Torn-Irisk. Brunnich</i> , 263. <i>Haueffert, Hampling. Kram.</i> 368. |
| <i>Fanello marino</i> . <i>Aldr.</i> av. ii. 360. | <i>Blut Handling</i> (Bloody Linnet). <i>Frisch.</i> i. 9. |
| <i>Wil. orn.</i> 260. | <i>Br. Zool.</i> 110. <i>Arct. Zool.</i> ii. 68. |
| <i>Raii syn.</i> av. 91. | |
| <i>La grand Linotte des vignes.</i> | |

Description THIS bird is less than the former; on the forehead is a blood colored spot; the rest of the head and the neck are of an ash-color; the breast is tinged with a fine rose color; the back, scapular feathers, and coverts of the wings, are of a bright reddish brown; the first quill feather is entirely black; the exterior and interior edges of the eight following are white, which forms a bar of that color on the wing.

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even when closed; the sides are yellow; the middle of the belly white; the tail, like that of the former, is forked, of a dusky color, edged on both sides with white, which is broadest on the inner webs. The head of the female is ash color, spotted with black; the back and scapulars are of a dull brownish red; and the breast and sides of a dirty yellow, streaked with dusky lines. It is a common fraud in the bird shops in *London*, when a male bird is distinguished from the female by a red breast, as in the case of this bird, to stain or paint the feathers, so that the deceit is not easily discovered, without at least close inspection.

These birds are frequent on our sea-coasts; and are often taken in *flight* time near *London*. It is a familiar bird, and is chearful in five minutes after it is caught.

It leaves *Italy* in flocks in *September* and *October*.

9. *Less Red Fringilla Linaria*. Fr. fusco headed. griseoque varia, subius albo-rufescens, fascia alba rum duplici albida, vertice pectoreque rubris. *Lath. ind. orn.* 458. *id. Syn.* iii. 305. *id. Sup.* i. 167. *Wil. orn.* 260. *Raii syn. av.* 91. La petite Linotte des vignes. *Brisson av.* iii. 138. Le Sizerin. *Hist. d'oiz.* iv. 216. *Pl. Enl.* 151. f. 2. *Fringilla Linaria. Gm. Lin.* 917. *Grasiska. Faun. Suec. sp.* 211. Grasel, Mierzeisel, Tschotscherl. *Kram.* 369. Rothplattige Staendling. *Fisch* i. 10. *Br. Zool.* 111. *Arct. Zool.* ii. 68.

Description. THIS is the lest of the genus, being scarcely half the size of the preceding. Its bill is dusky, but the base of the lower mandible yellow; the forehead ornamented with a rich shining spot of a purplish red; the breast is of the same color, but not so bright; yet, in the breasts of some, we have found the red wanting; the belly is white; the back dusky, edged with reddish brown; the sides in some yellowish, in others ash color, but both marked with narrow dusky lines; the quill feathers, and those of the tail, are dusky, bordered with dirty white. The coverts dusky, edged with white, so as to form two transverse lines of that color. The spot on

CLASS II. LESS RED HEADED F. 407

the forehead of the female is of a saffron color; the legs are dusky.

We have seen the nest of this species on an alder stump near a brook, between two or three feet from the ground: it was made on the outside with dried stalks of grass and other plants, and here and there a little wool, the lining consisted of hair and a few feathers: the bird was sitting on four eggs of a pale bluish green, thickly sprinkled near the blunt end with small reddish spots, and was so tenacious of her nest, as to suffer us to take her off with our hand, and we found that after we had released her she would not forsake it.

This seems to be the species known about London under the name of *stone redpoll*: it is gregarious.

10. *Twite*. *Fringilla Linaria*. ♂. Fr. supravaria, subtus rufescens, abdomine albedo, superciliis fasciaque alarum rufescentibus, vertice uropygioque rubris. *Lath. ind. orn.* 459. *id. Syn.* iii. 307. *Le Picaveret? Belon av.* 358. *Wil. orn.* 261. *Rail syn. av.* 91.
- Fanello dell'Aquila. *Olin.* 8.
Linaria montana. Linaria minima. La petite Linotte, ou le Cabaret. *Brisson av.* iii. 142. *Hist. d'ois.* iv. 76. *Pl. Ent.* 485. f. 2.
Linaria fersaxatilis. Klein. hist. av. 93.
Br. Zool. 111. *Arct. Zool.* ii. 70.

THIS is an inhabitant of the hilly parts of our country, as Mr. *Willughby* informs us. He says it is twice the size of the last species; that the color of the head and back is the same with that of the common linnet: that the feathers on the throat and breast are black edged with white; and that the rump is of a rich scarlet or orange tawny color; that the edges of the middle quill feathers are white, as are the tips of those of the second row; the two middle feathers of the tail of a uniform dusky color; the others edged with white. This species is taken in the flight season near *London* with the linnets; it is there called a *Twite*. The birds we examined differed in some particulars

from Mr. *Willughby's* description. In size they *Description* were rather inferior to the common linnet, and of a more taper make; their bills short, and entirely yellow; the head cinereous and black; above each eye was a spot of pale brown; the back rusty, spotted with black; the coverts of the tail of a rich scarlet; the tips of the greater coverts of the wings, white; the primaries dusky; the inner sides white; the tail dusky, and all but the two middle feathers were edged with white. The female wants the red mark on the rump.

These birds take their name from their note, which has no music in it: it is a familiar bird, and more easily tamed than the common linnet.

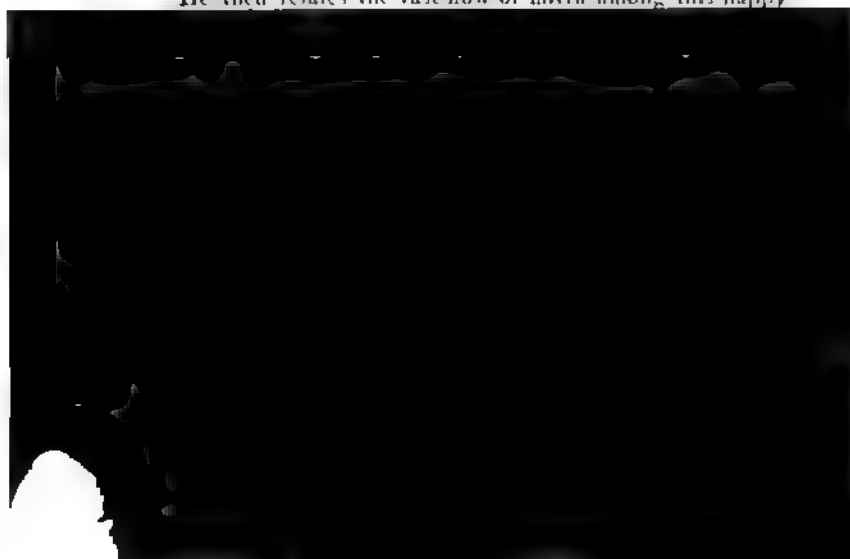
We believe it breeds only in the Northern parts of our island.

Here it may not be improper to mention the Canary bird,* which is of the finch tribe. *Canary bird.* It was originally peculiar to those isles, to which it owes its name; the same that were known to the antients by the addition of the *fortunate*. The happy temperament of the air; the spontaneous productions of the ground in

* *Wil. orn.* 262. *Raii Syn. av.* 91. *Serin des Canaries.* *Brisson av.* iii. 184. *Fringilla Canaria.* *Gm. Lin.* 913.

the varieties of fruits; the 'sprightly and chearful disposition of the inhabitants;* and the harmony arising from the number of the birds found there,† procured them that romantic distinction. Though the antients celebrate the isle of *Canaria* for the multitude of birds,, they have not mentioned any in particular. It is probable then, that our species was not introduced into *Europe* till after the second discovery of these isles, which was in the fourteenth century. We are uncertain when it first made its appearance in this quarter of the globe. *Belon*, who wrote in 1555, is silent in respect to these birds: *Gesner*‡ is the first who mentions them; and *Aldrovand*|| speaks of them

* *Fortunatæ insulæ abundant sua sponte genitis, et subinde aliis super aliis inascentibus nihil sollicitos alunt; beatius quam aliæ urbes excultæ. Mela de sit. orb. iii. 17.*
 He then relates the vast flow of mirth among this happy



as rarities; he says that they were very dear on account of the difficulty attending the bringing them from so distant a country, and that they were purchased by people of rank alone. *Olin** says, that in his time there was a degenerate sort found on the isle of *Elba*, off the coast of *Italy*, which came there originally by means of a ship bound from the *Canaries* to *Leghorn*, which was wrecked on that island. We once saw some small birds brought directly from the *Canary* Islands, that we suspect to be the genuine sort; they were of a dull green color, but as they did not sing, we supposed them to be hens. These birds will produce with the goldfinch and linnet, and the offspring is called a mule-bird, because, like that animal, it proves barren.

They are still found† on the same spot to which we were first indebted for the production of such charming songsters; but they are now become so numerous in our country, that we are under no necessity of crossing the ocean for them.

* *Olin uccel*, 7.

† *Glas's hist. Canary Isles*, 199.

502 SPOTTED FLY CATCHER. CLASS II.

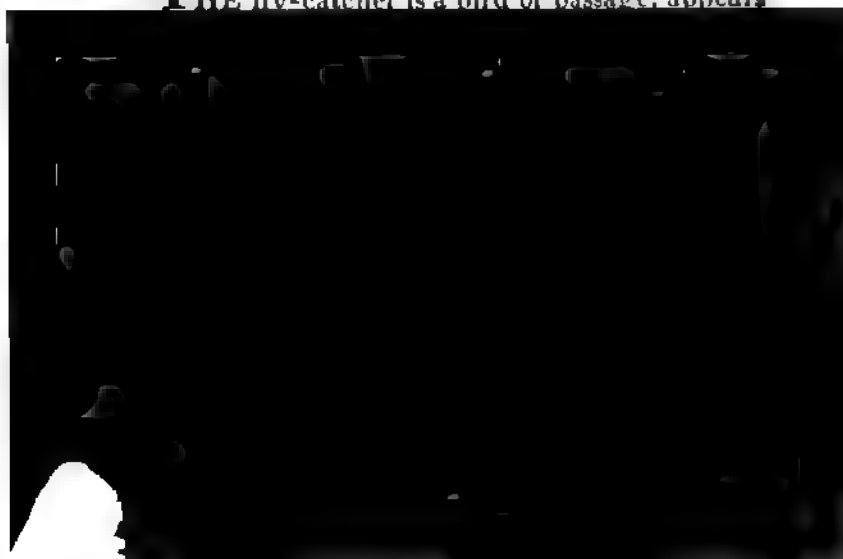
GENUS XXIV. FLY-CATCHER.

BILL flattened at the base, almost triangular,
notched near the end of the upper man-
dible, and beset with bristles.

TOWNS divided to their origin.

1. *Spotted*. *Muscicapa*. *Grisola*. *M. sub-* *Zinn*. 45.
fascia subtus albicans, col- *The Cobweb. Morton Nor-*
lo longitudinaliter macu- *thampt. 426.*
late, crisso rufescente. *Le Gobe-mouche, Musci-*
Lath. ind. orn. 467. id. *capa. Brisson av. ii. 357.*
Syn. iii. 323. *tab. 35. f. 3. Hist. d'ois.*
Stoparola. Aldr. av. ii. 324. *iii. 517. Pl. Enl. 565.*
A small bird without a name, *f. 1.*
like the Stopparola of Al. *Muscicapa Grisola. Gm-*
drovand. Wil. orn. 217. *Lin. 919.*
Rall syn. av. 77. *Br. Zool. 99. plate P. 2. f.*
4. Arct. Zool. ii. 83.

THE fly-catcher is a bird of passage, appears



CLASS II. SPOTTED FLY CATCHER. 503

ones withdraw with them into thick woods, where they frolick among the top branches; frequently dropping from the boughs quite perpendicularly on the flies that sport beneath, and rising again in the same direction. They will also take their stand on the top of some stake or post, from whence they spring forth on their prey, returning still to the same stand for many times together. They feed also on cherries, of which they seem very fond.

The head is large, of a brownish hue spotted *Description* obscurely with black; the back of a mouse color; the wings and tail dusky; the interior edges of the quill feathers edged with pale yellow; the breast and belly white; the shafts of the feathers on the former dusky; the throat and sides under the wings are dashed with red; the bill is very broad at the base, ridged in the middle, and round the base are several short bristles; the inside of the mouth is yellow; the legs and feet short and black.

- Pied.* *Muscicapa atricapilla*. M. *Le Traquet d'Angleterre.*
nigra, subtus frontisque *Rubetra anglicana. Bris-*
macula alarumque speculo son av. iii. 436. Hist.
alba, rectricibus laterali- *d'ois. v. 222.*
bus extus albis. Lath. ind. Meerschwartz pluffie. Kra-
orn. 467. id. Syn. iii. 323. mer Aust. 377.
Atricapilla sive ficedula. Muscicapa Atricapilla. Gm.
Aldr. av. ii. 331. Lin. 935.
Cold finch. Wil. orn. 236. Faun. Succ. No. 256. tab.
Rati syn. av. 77. 1. 103. 5. f. 1.
Edw. 30. Cold-finch. Br. Zool. 103.
Frisch, i. 22. B. fig. 1. Arct. Zool. ii. 85.

Description. **THIS** is less than a hedge sparrow. The bill and legs are black; the forehead white; the head, cheeks, and back black; the coverts of the tail spotted with white; the coverts of the



CLASS II. PIED FLY-CATCHER. 505

body are of dusky brown; the white in the wings is less conspicuous; the under side of the body is of a dirty white.

It is found occasionally in different parts of *England*.

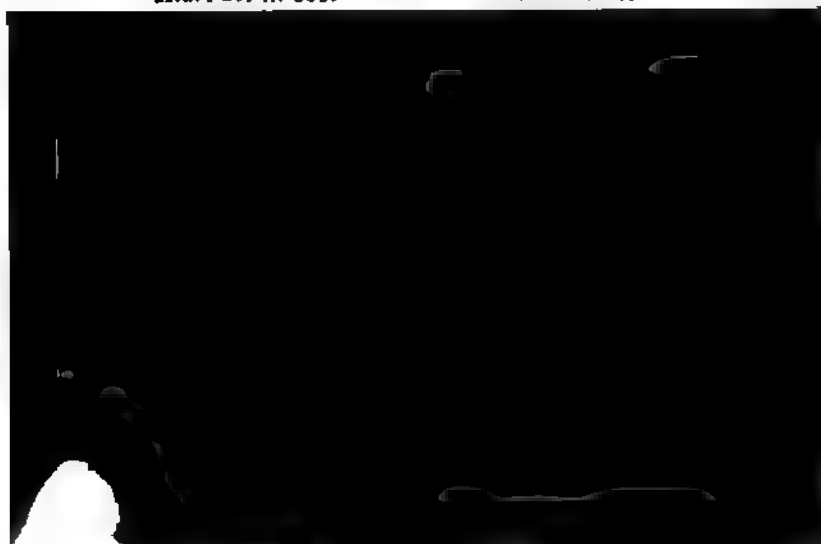
GENUS XXV. LARK.

BILL weak, strait, bending towards the point.

NOSTRILS covered with feathers or bristles.

TOES divided to their origin; back toe armed with a long and strait claw.

1. *Sky.* *Aluda. Arvensis. A. nigricante* griseo-rufescente et albido varia, subtus rufo-alba, rectricibus extimis duabus extrorsum longitudinaliter albis, intermediiis interiori latere ferrugineis. *Lath. ind. orn.* 491. *id. Syn. iv.* 368. *L'Alouette. Belon av.* 269. *Chamochilada. Obs.* 12. *Alauda sine crista. Gesner av.* 78. *Aldr. av. ii.* 369. *Rati syn. av.* 69. *L'Alouette. Brisson av. iii.* 335. *Hist. d'oïis. v. l. Pl. Enl.* 363. *f. 1.* *Allodola, Panterana. Si. nan.* 55. *Alauda arvensis. Gm. Lin.* 791. *Larka. Faun. Suec. sp.* 209. *Alauda cœlipeta. Klein stem. Tab.* 15. *f. 1.* *Sang-Lærke. Br.* 221. *Feldlerche. Kram.* 362. *Frisch i.* 15.



mandible dusky, the lower yellow; above the eyes is a yellow spot; the crown of the head is of a reddish brown spotted with deep black; the hind part of the head ash-color; the chin white. It has the faculty of erecting the feathers of the head. The feathers on the back, and coverts of the wings are dusky edged with reddish brown, which is paler on the latter; the quill feathers dusky; the exterior web edged with white, that of the others with reddish brown; the upper part of the breast yellow spotted with black; the lower part of the body of a pale yellow; the exterior web, and half of the interior web next to the shaft of the first feather of the tail are white; of the second only the exterior web; the rest of those feathers dusky; the others are dusky edged with red; those in the middle deeply so, the rest very slightly; the legs dusky; the soles of the feet yellow; the hind claw very long and strait. It builds its nest on the ground, beneath some clod; forming it of hay, dry fibres, &c. and lays four or five eggs of a dirty white color, blotched and spotted with brown.

This, the wood lark and the tit lark, are the only birds that sing as they fly; this raising

its note as it soars, and lowering it till it quite dies away as it descends. It will often soar to such a height, that we are charmed with the music when we lose sight of the songster; it also begins its song before the earliest dawn. *Milton*, in his *Allegro*, most admirably expresses these circumstances; and bishop *Newton* observes, that the beautiful scene which *Milton* exhibits of rural cheerfulness, at the same time gives us a fine picture of the regularity of his life, and the innocency of his own mind; thus he describes himself as in a situation

To hear the lark begin his flight,
And singing startle the dull night,
From his watch tower in the skies,
'Till the dappled dawn doth rise.

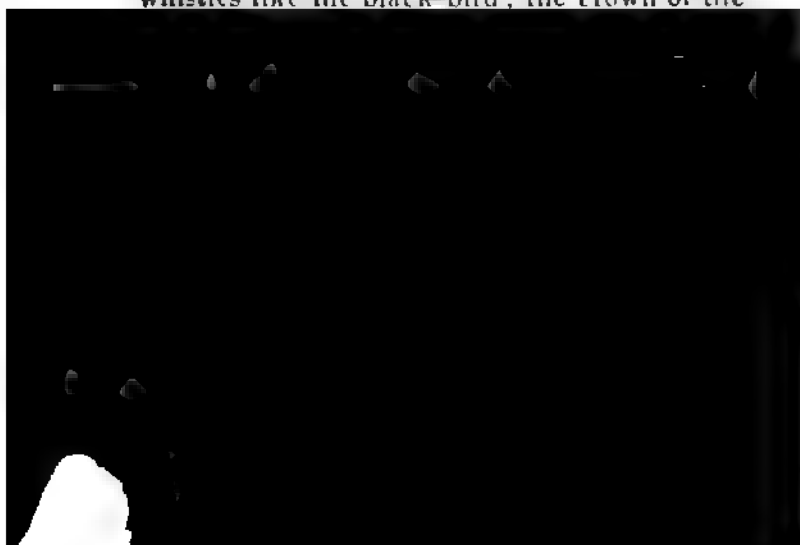
It continues its harmony several months, be-



that time, about 4000 dozen are taken, which supply the markets of the metropolis. Those caught in the day are taken in clap-nets of fifteen yards in length, and two and a half in breadth, and are enticed within their reach by means of bits of looking-glass, fixed in a piece of wood, and placed in the middle of the nets, which are put in a quick whirling motion, by a string the larker commands; he also makes use of a decoy lark. These nets are used only till the fourteenth of *November*, for the larks will not *dare*, or frolick in the air except in fine sunny weather, and of course cannot be inveigled into the snare. When the weather grows gloomy, the larker changes his engine, and makes use of a trammel net twenty-seven or twenty-eight feet long, and five broad, which is put on two poles eighteen feet long, and carried by men under each arm, who pass over the fields and quarter the ground as a setting dog; when they hear or feel a lark hit the net, they drop it down, and so the birds are taken.

- Wood.* *Alauda arborea.* *A. varia,* *Alauda arborea.* *Gm. Lin.*
capite vitta annulari alba 793.
cincto. *Lath. Ind. orn.* 492. *Faun. Suec. sp.* 211.
id. Syn. iv. 370. *Ludlerche, Waldlerche,*
Tottavilla. *Olina,* 27. *Kram.* 362.
Wil. orn. 204. *Danis Skov-Lærke, Cimbria*
Rati syn. av. 69. *Heede-Leker, Lyng-*
L'Alouette de Bois ou le Cu- *lreke.* *Br.* 224.
jelier. *Brisson av.* iii. 340. *Zippa.* *Scopoli, No.* 186.
Tab. 20. *fig.* 1. *Hist.* *Br. Zool.* 94. *plate Q. f.* 3.
Bois. v. 25. *Pl. Ent.* 660. *Arct. Zool.* ii. 87.
f. 2.

Description **THIS** bird is inferior in size to the sky lark, and is of a shorter thicker form; the colors are paler; its note less sonorous and varied, though not less sweet. These and the following characters, may serve at once to distinguish it from the common kind: it perches on trees; it whistles like the black-bird; the crown of the



dull yellow; the quill feathers dusky; the exterior edges of the three first white; of the others yellow, and their tips blunt and white; the first feather of the wing is shorter than the second; in the common lark it is nearly equal; the tail is black, the outmost feather is tipped with white; the exterior web, and inner side of the interior are also white; in the second feather, the exterior web only; the legs are of a dull yellow; the hind claw very long. The wood lark will sing in the night, and, like the common lark, will sing as it flies. It builds on the ground, and makes its nest on the outside with moss, within of bents lined with a few hairs. It lays five eggs, dusky and blotched with deep brown, the marks darkest at the thicker end.

The males of this and the last species, are known from the females by their superior size; but this is not near so numerous as the preceding.

This species migrates from *Italy* in *October*; the sky lark seldom quits that country.

2. *Tit*. *Alauda pratensis*. *A. viridifusca*, rectricibus duabus extrorsum albis, linea superciliari alba. *Lath. ind. orn.* 493. *id. Syn.* iv. 374. *LaFarlouse*, Fallope ou L'A. louette de pre. *Belon av.* 272. *Aldr. av.* ii. 370. *Lodolo di Prato. Olina*, 27. *Wil. orn.* 206. *Raii syn. av.* 69. *L'Alouette de prez ou la* *Farlouse. Brisson av.* iii. 343. *Hist. d'oïs.* v. 31. *Pl. Enl.* 660. f. 1. *Mattolina*, Petragiola, Corriera. *Zinan.* 55. *Alauda pratensis. Gm. Lin.* *Faun. Succ. sp.* 210. *Wiesen Lerche* (Meadows Lark). *Frisch*, i. 16. *Englerke. Br.* 223. *Br. Zool.* 94. plates Q. f. 6. *Arct. Zool.* ii. 87.

Description. THIS bird is frequently found in low marshy grounds. It builds its nest among the grass, lining it with horse hair, and lays five or six eggs, generally of a deep brown color, but sometimes whitish, and thickly speckled with rufous brown. Like the woodlark it sits on trees, and has a most remarkable fine note, singing in all situations, whether when perched or on the ground, or while it is sporting in the air, and particularly in its descent. This bird with many others, such as the thrush, blackbird, willow wren, &c. become silent about *Midsummer*, and resume their notes in *September*:

hence this interval is the most mute of the year's three vocal seasons, spring, summer, and autumn: perhaps they are induced to sing again as the autumnal temperature resembles the vernal. It is a bird of an elegant slender shape: the length is five inches and a half; the breadth nine inches. The bill is black; the throat and lower part of the belly are white; the breast yellow, marked with oblong spots of black; the tail is dusky; the exterior feather is varied by a bar of white, which runs across the end, and takes in the whole outmost web. The claw on the hind toe is very long, the feet yellowish.


- | | |
|--|---|
| { <i>Alauda obscura</i> . A. olivaceo- | <i>Lath. Ind. orn.</i> 494. 4. <i>Dusky</i> . |
| <i>fusca nigricante varia,</i> | <i>id. Sup. ii.</i> 227. |
| <i>subtus flavicans, lateribus</i> | <i>Montagu Orn. Dict.</i> |
| <i>colli pectoreque maculis</i> | <i>Alauda petrosa. Lin. Tr. iv.</i> |
| <i>fusciscentibus, rectrice</i> | 41. |
| <i>extrema dimidiato, secunda</i> | <i>Br. Zool. 94. Tab. P. 1. f.</i> |
| <i>apice albo cinerascete.</i> | 3. |

THIS bird so nearly resembles the tit lark, that, in the preceding edition of the *British Zoology*, it was considered to be a variety of it:

but later ornithologists agree in describing it as a distinct species.

Description. In size it exceeds the tit lark: the upper part of the head, back of the neck, and tail coverts, are of a dark brown; the back and scapulars of the same color, obscurely marked with dusky strokes; the throat whitish, the breast and belly of a yellowish white; the former blotched with large dusky spots; the sides marked with strokes of the same; the tail three inches long; the legs brown; the hind claw, which is crooked, is about four tenths of an inch in length.

According to Mr. *Montagu*, it begins breeding early in the spring. The nest is made of dry grass, marine plants, and a very little moss externally, and lined with fine grass and a few long hairs. This is generally placed on the shelf of a rock near the sea, where there



seems confined to the neighbourhood of the sea.] Ed.

<p>[<i>Alauda trivialis</i>. <i>A. nigricante et olivaceo varia, subtus alboflavicans maculis nigricantibus, rectrice extima dimidiato secunda apice alba.</i> <i>Lath. ind. orn.</i> 493. <i>Gm. Lin.</i> 796.</p>	<p>Grasshopper Warbler. <i>Lath.</i> 5. <i>Pipit. Syn.</i> iv. 429. (<i>quoad synon.</i>) <i>A. sepiaria.</i> <i>Brisson av.</i> iii. 349. <i>Alouette pipi.</i> <i>Hist. d'oïs.</i> v. 39. t. 4. <i>Piep Lerche,</i> <i>Frisch,</i> 26. <i>Pipit Lark.</i> <i>Alb.</i> i. 44.</p>
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THE Pipit Lark so nearly resembles the tit lark and the grasshopper warbler, that it has generally been confounded with them. It can only be distinguished from the former by the color of the upper parts being more olivaceous, the yellow of the under more ferruginous, and its superior size, being six inches and a half in length.] Ed.

<p><i>Alauda minor.</i> <i>A. rubro-fusca subtus maculata, gula abdomineque albis, jugulo pectoreque obscure flavescens.</i> <i>Lath. ind. orn.</i> 494. <i>id. Syn.</i> iv. 375.</p>	<p><i>Alauda minor.</i> <i>Gm. Lin.</i> 6. <i>Field.</i> 793. The Lesser Field Lark. <i>Wil. orn.</i> 207. <i>Arct. Zool.</i> ii. 88.</p>
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THIS species we received from Mr. Plymly. *Description.*

It is larger than the tit lark; the bill dusky above, whitish beneath; the head and hind part of the neck are of a pale brown, spotted with dusky lines, which on the neck are very faint; the back and rump are of a dirty green, the former marked in the middle of each feather with black, the latter plain; the coverts of the wings dusky, deeply edged with white; the quill feathers dusky; the exterior web of the first edged with white, of the others with a yellowish green. The throat is yellow; the breast of the same color, marked with large black spots; the belly and vent-feathers white; on the the thighs are a few dusky oblong lines: the tail is dusky, but half the exterior and interior web of the outmost feather is white; the next is marked near the end, with a short white stripe pointing downwards; the legs are of a very pale yellowish brown; and



- Alauda rubra.* A. obscure
 fusca, subtus fulvo-rufes-
 cens, maculis fuscis varia,
 genis nigricantibus, super-
 ciliis pallide rufis. *Lath.*
ind. orn. 494. *id. Syn.* iv.
 376.
- Pensylvanie. *Brisson av.* 7. *Red.*
Sup. 94. *Hist. d'oïs.* v.
 58.
- Alauda rubra.* *Gm. Lín.* 794.
 Lark from Pennsylvania.
Edw. tab. 297.
- Br. Zool.* ii. 239. *Arct.*
Zool. ii. 85.
- Alouette a jones brunes de

I MET with this species in the magnificent and elegant *Museum of Ashton Lever, Esq;* where the lover of *British* or exotic ornithology, may find delight and instruction equally intermixed.

This species is equal in size to the common *Descrip- or* lark. A white line crosses each eye, and another passes beneath; the bill is thick; the chin and throat whitish; the head, neck, back, and coverts of the wings are of a rusty brown, spotted with black; the breast whitish, with dusky spots; the belly of a dirty white; the middle feather of the tail black edged with brown; the two exterior white; the legs of a pale brown.

This bird is common to the neighbourhood of *London*, to *North America*, and to the South

south of *England*, during that season. In spring and autumn it is a constant attendant of the plough, for the sake of the worms thrown up by that instrument.

Description The head, back, and upper and lower side of the neck as far as the breast are black; in some the chin is white, and the throat is marked with a black crescent; the breast, and belly are white; the quill feathers are dusky; the coverts black tip and edged with white; the tail is very long, and always in motion; the exterior feather on each side is white, the lower part of the inner web excepted, which is dusky; the other feathers are black; the bill, inside of the mouth, and the legs, are black; the back claw very long.

It visits *Italy* in *April*, and departs in *September*.



- Motacilla flava.** *M. pectore* *Edw. av.* 258. 2. *Yellow.*
abdomineque flavis, rec- *Bergeronatte de Printems.*
tricibus duabus laterali- *Brisson av. iii. 468. Hist.*
libus dimidiato oblique *d'ois. 265. t. 14. f. 1. Pl.*
albis. Lath. ind. orn. 504. *Enl. 674. 2.*
id. Syn. iv. 400. id. Sup. *Motacilla flava. Gm. Lin.*
i. 179. 963.
La Bergerette. Belon av. 351. *Faun. Suec. 253.*
Motacilla flava alia. Aldr. *Scop. An. No. 226.*
av. ii. 383. *Br. Zool. 105. Arct. Zool.*
Wil. orn. 238. t. 68. ii. 19.
Rati syn. av. 75.

THE male is a bird of great beauty: the *Description.* breast, belly, thighs, and vent-feathers, being of a most vivid and lovely yellow; above the eye is a bright yellow line; beneath that, from the bill across the eye is a third of the same color; the head and whole upper part of the body is of an olive green, which brightens in the coverts of the tail; the quill feathers are dusky; the coverts of the wings olive colored, but the lower rows dusky, tipped with yellowish white; the two outmost feathers of the tail half white; the others black, as in the former.

The colors of the female are far more obscure than those of the male.

522 YELLOW WAGTAIL. CLASS II.

It makes its nest on the ground, in corn fields; the outside is composed of decayed stems of plants, and small fibrous roots; the inside is lined with hair: it lays five eggs, of a pale brown color, sprinkled with a darker shade, and not unlike those of the sedge warbler. This species migrates in *September*.

- | | | |
|-----------------|--|--|
| 3. <i>Grey.</i> | M. Boarula. M. cinerea sub-
tus flava, rectrice prima
tota, secunda latere interi-
ore alba. <i>Lath. ind. orn.</i>
502. <i>id. Syn.</i> 398. <i>id. Sup.</i>
i. 178. | Coda tremola. <i>Zinn.</i> 61.
Bergeronettejaune. <i>Brisson</i>
<i>av.</i> ill. 471. <i>t.</i> 23. <i>f.</i> 3.
<i>Hist. d'ois.</i> v. 268. <i>Pl.</i>
<i>Enl.</i> 28. <i>f.</i> 1.
Grey Wagtail. <i>Edw.</i> <i>av.</i>
269. |
| | Saxatula. <i>Belon obs.</i> ii. | |
| | Motacilla flava, (Gale Was-
sersteltz.) <i>Gesner.</i> <i>av.</i> 618. | Motacilla Boarula. <i>Gm.</i>
<i>Lin.</i> 997. |
| | <i>Aldr.</i> <i>av.</i> 323. | <i>Scopoli</i> , 225. |
| | <i>Wil.</i> <i>orn.</i> 328. | <i>Br. Zool.</i> 105. |
| | <i>Rau sun.</i> <i>av.</i> 75. | |



cumbent on the tail are yellow; the tail is longer, in proportion to its size, than that of the other kinds; the two exterior feathers are white, the rest black; the breast, and whole under side of the body are yellow; the quill feathers are dusky; those next the back edged with yellow. The colors of the female are usually more obscure; and the black spot on the throat is wanting in that sex.

The birds of this genus are much in motion; seldom perch; are perpetually flirting their tails; scream when they fly; frequent waters; feed on insects, and make their nests on the ground.

GENUS XXVII. WARBLER.

BILL slender and weak.

NOSTRILS small and sunk.

TOE exterior, joined at the under part of the last joint to the middle toe.

- | | |
|---|--------------------------------------|
| 1. <i>Nightin. Sylvia Luscinia. S. rufo-cl-</i> | Slauz. <i>Scopoli. No. 227.</i> |
| <i>gale. nerea subtus cinereo-alba,</i> | Rusignulo. <i>Zinam. 54.</i> |
| <i>rectricibus fusco-rufis, ar-</i> | Motacilla <i>Luscinia. Gm.</i> |
| <i>millis cinereis. Lath. ind.</i> | <i>Lin. 950.</i> |
| <i>orn. 506. id. Syn. iv. 408.</i> | Nachtergahl. <i>Faun. Succ.</i> |
| <i>id. Sup. i. 180.</i> | <i>sp. 244.</i> |
| Le Rossignol. <i>Belon av. 336.</i> | <i>Hasselquist Itin. Ter. Sanct.</i> |
| Adoni, Aidoni. <i>Obs. 12.</i> | <i>291.</i> |
| <i>Luscinia. Gesner. av. 592.</i> | Nattergale. <i>Brunnich in</i> |
| <i>Aldr. av. ii. 336.</i> | <i>append.</i> |
| <i>Wil. orn. 220.</i> | Au-vogel, Auen-nächtigall. |
| <i>Rati syn. av. 78.</i> | <i>Kram. 376.</i> |
| Le Rossignol. <i>Brissan av.</i> | Nachtigall. <i>Frisch, i. 21.</i> |



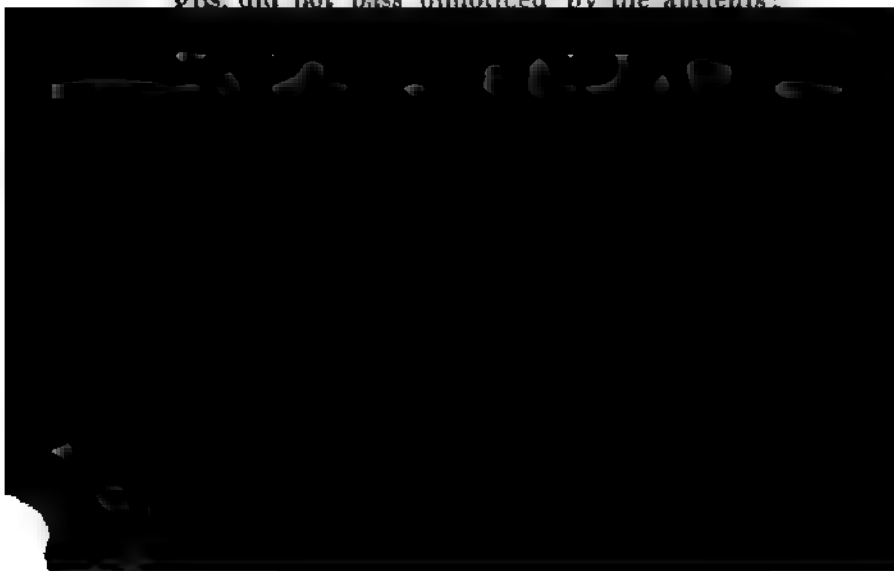
head and back are of a pale tawny, dashed with olive; the tail is of a deep tawny red; the throat, breast, and upper part of the belly, are of a light glossy ash-color; the lower belly almost white; the exterior webs of the quill feathers are of a dull reddish brown; the interior of brownish ash-color; the irides are hazel, and the eyes remarkably large and piercing; the legs and feet of a deep ash-color.

This bird, the most famed of the feathered tribe, for the variety,* length, and sweetness of its notes, visits *England* the beginning of *April*, and leaves us in *August*. It is a species that does not spread itself over the island. It is not found in *North Wales*, or in any of the *English* counties north of it, except *Yorkshire*, where it is met with in great plenty about *Doncaster*. It has been also heard, but rarely, near *Shrewsbury*. It is also remarkable, that this bird does not migrate so far west as *Devonshire* and *Cornwall*; counties where the seasons are so very mild, that myrtles flourish in the open

* For this reason, *Oppian*, in his *halieutics*, l. 1. 728. gives the nightingale the epithet of of ἀιολοφώνη, or *various voiced*; and *Hesiod*, (figuratively) of ποικιλοδισφα, or *various throated*. Ἔργα καὶ ἡμέραι, l. 201.

air during the whole year: neither is it found in *Ireland*. *Sibbald* places nightingales in his list of *Scotch* birds; but they certainly are unknown in that part of *Great Britain*, probably from the scarcity and the recent introduction of hedges there; yet they visit *Sweden*, a much more severe climate. With us they frequent thick hedges, and low coppices, and generally keep in the middle of the bush, so that they are very rarely seen. They form their nest of oak leaves, a few bents and reeds. The eggs are of a deep brown. When the young first come abroad, and are helpless, the birds make a plaintive and jarring noise with a sort of snapping as if in menace, pursuing the passengers along the hedge.

They begin their song in the evening, and continue it the whole night. These, their vigils, did not pass unnoticed by the antients:



stantly noting its love of solitude and night. How finely does it serve to compose part of the solemn scenery of his *Penseroso*; when he describes it

In her saddest sweetest plight,
Smoothing the rugged brow of night;
While *Cynthia* checks her dragon yoke,
Gently o'er th' accustom'd oak;
Sweet bird, that shunn'st the noise of folly,
Most musical, most melancholy!
Thee, chauntress, oft the woods among,
I woo to hear thy evening song.

In another place he styles it the *solemn bird*; and again speaks of it,

As the wakeful bird
Sings darkling, and in shadiest covert hid,
'Tunes her nocturnal note.

The reader must excuse a few more quotations from the same poet, on the same subject; the first describes the approach of evening, and the retiring of all animals to repose:

Silence accompanied; for beast and bird,
They to their grassy couch, these to their nests,
Were slunk; all but the wakeful *nightingale*,
She all night long her amorous descant sung.

When *Eve* passed the irksome night preceding her fall, she, in a dream, imagines herself thus reproached with losing the beauties of the night by indulging too long a repose:

Why sleep'st thou, *Eve*? now is the pleasant time,
The cool, the silent, save where silence yields
To the night-warbling bird, that now awake
Tunes sweetest his love-labor'd song.

The same birds sing their nuptial song, and
lull them to rest. How rapturous are the fol-
lowing lines! how expressive of the delicate
sensitivity of our *Milton's* tender ideas!

The Earth
Gave sign of gratulation, and each hill;
Joyous the birds; fresh gales and gentle airs
Whisper'd it to the woods, and from their wings
Flung rose, flung odors from the spicy shrub,
Disporting, till the amorous bird of night
Sung spousal, and bid haste the evening star
On his hill-top to light the bridal lamp.

These, lull'd by *nightingales*, embracing slept;
And on their naked limbs the flowery roof
Shower'd roses, which the morn repair'd.

These quotations from the best judge of me-



Observans nido implumes detraxit: at illa
Flet noctem, romaque sedens miserabile carmen
Integrat, et mœstis late loca questibus implet.

Georg. IV. l. 511.

As *Philomel* in poplar shades, alone,
For her lost offspring pours a mother's moan,
Which some rough ploughman marking for his prey,
From the warm nest, unfledg'd hath dragg'd away,
Percht on a bough, she all night long complains,
And fills the grove with sad repeated strains.

Warton.

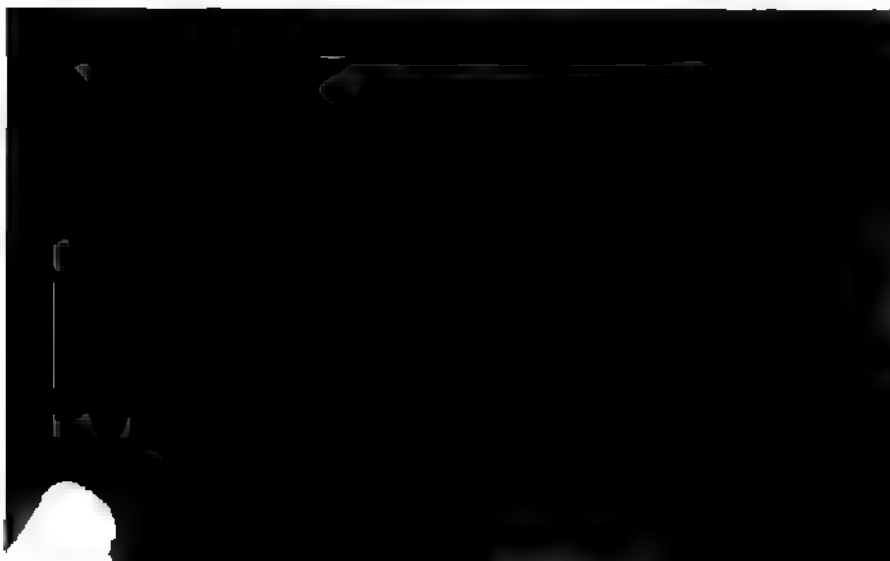
Pliny has described the warbling notes of this bird, with an elegance that bespeaks an exquisite sensibility of taste; notwithstanding that his words have been cited by most other writers on natural history, yet such is the beauty, and in general the truth of his expressions, that they cannot be too much studied by lovers of natural history, and therefore clame a place in a work of this kind. We must observe notwithstanding, that a few of his thoughts are more to be admired for their vivacity than for strict philosophical reasoning; but these few are easily distinguishable.

“ *Lusciniis* diebus ac noctibus continuis xv. garrulus
“ sine intermissu cantus, densante se frondium germine,
“ non in novissimum digna miratu ave. Primum tanta vox
“ tam parvo in corpusculo, tam pertinax spiritus. Deinde

“ in una perfecta musicæ scientia modulatus editur sonus :
“ et nunc continuo spiritu trahitur in longum, nunc vari-
“ atur inflexo, nunc distinguitur conciso, copulatur in ton-
“ to: promittitur revocato, infusatur ex in opinato: in-
“ terdum et secum ipse murmurat: plenus, gravis, acutus,
“ creber, extensus, ubi visum est, vibrans, summus, medi-
“ us, imus. Breviterque omnia tam parvulis in faucibus,
“ quæ tot exquisitis tibiæ tormentis ars hominum ex-
“ cogitavit: ut non sit dubium hanc suavitatem præmon-
“ stratam efficaci auspicio, cum in ore *Stesichori* cecinit
“ infantis. Ac ne quis dubitet artis esse, plures singulis
“ sunt cantus, nec iidem omnibus, sed sui cuique. Certant
“ inter se, palamque animosa contentio est. Victa morte
“ fuit sæpe vitam, spiritu prius deficiente, quam cantu.
“ Meditantur aliæ juniores, versusque quos imitentur
“ accipiunt. Audit discipula intentione magna et reddit,
“ vicibusque reticent. Intelligitur emendatæ correctio et
“ in docente quædam reprehensio.”*

The nightingale arrives in *Italy* at the end
of *April*, and disappears in *September*.

* *Plin.* lib. x. c. 29.



CLASS II. REDSTART WARBLER. 531

- Sylvia. Phœnicurus. S. gula nigra*, abdomine caudaque rufis, capite dorsoque canis, fronte alba. *Lath. ind. orn.* 511. *id. Syn.* iv. 421. *Le Rossignol de Muraille. Belon av.* 347. *Ruticilla*, sive *Phœnicurus* (Sommerotele) *Gesner av.* 731. *Aldr av.* ii. 327. *Codorosso. Olini*, 47. *Wil. orn.* 218. *Raii syn. av.* 78. *Ruticilla. Brisson av.* iii. 403. *Rossignol de murailles. Hist. d'ois.* v. 170. *Pl. Enl.* 2. *Redstart*, 351. f. 1. 2. *Culo ranzo, Culo rosso. ai. nan.* 53. *Scopoli*, No. 232. *Motacilla Phœnicurus. Gm. Lin.* 987. *Rodstjert. Faun. Suec. sp.* 257. *Norvegis Blod-fugl. Danis Roed-stiert. Brunnich*, 280. *Schwartzkehlein* (Black-throat) *Frisch.* i. 19. *Waldrothschweiff. Kram.* 376. *Br. Zool.* 99. plate S. f. 6. 7. *Arct. Zool.* ii. 112.

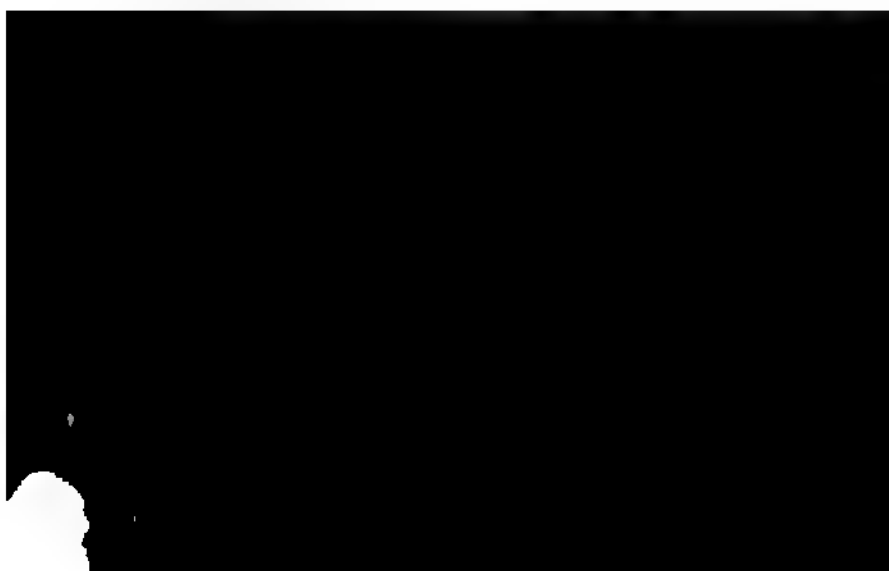
THIS also appears among us only in the spring and summer, and is observed to come over nearly at the same time with the nightingale. It makes its nest in hollow trees, and holes in walls and other buildings, which it forms with moss on the outside, and lines with hair and feathers. It lays four or five eggs, very like those of the hedge-sparrow, but rather paler, and more taper at the lesser end. This bird is so remarkably shy, that it will forsake its nest, if the eggs are only touched. It

532 REDSTART WARBLER. *CLASSE 17.*

has a very fine soft note, but being a sullen bird, is with difficulty kept alive in confinement. It is remarkable in shaking its tail, and moves it horizontally as a dog does when fawning.

Description. The bill and legs of the male are black; the forehead white; the crown of the head, hind part of the neck, and the back are of a deep blue grey; the cheek and throat black; the breast, rump and sides are red; the two middle feathers of the tail brown, the others red; the wings brown. In the female, the top of the head and back are of a deep ash-color; the rump and tail of a duller red than those of the male; the chin white; the lower side of the neck cinereous; the breast of a paler red.

It visits and departs from *Italy* sooner than the red-breast.



CLASS II. RED-BREAST WARBLER. 533

Sylvia. Rubecula. S. grisea, gula pectoreque ferrugi- neis. <i>Lath. ind. orn.</i> 520. <i>id. Syn.</i> iv. 442.	<i>Pl. Enl.</i> 361. f. 1. Pettorosso. <i>Sinan.</i> 46. Motacilla Rubecula. <i>Gm.</i> <i>Lin.</i> 993.	3 Red-breast
Rubeline. <i>Belon av.</i> 348. Rubecula. <i>Gesner av.</i> 730. Erithacus. <i>Aldr av.</i> ii. 325. <i>Olin.</i> 16.	Rotgel. <i>Faun. Suec. sp.</i> 260. Roed-Finke, Roed-Kielke. <i>Br.</i> 283. Rothkehlein. <i>Frisch,</i> i. 19. Rothkropfl. <i>Kram.</i> 376. Smarnza, Taschtza. <i>Scopo- li,</i> No. 231.	
Robin Red-breast, or Rud- dock. <i>Wil. orn.</i> 219. <i>Rati syn av.</i> 78.	<i>Br. Zool.</i> 100. plate S. 2. f. 2. <i>Arct. Zool.</i> ii. 113.	
Le Rouge-gorge. <i>Brisson av.</i> iii. 418. <i>Hist. d'oï.</i> v. 196.		

THIS bird, though so very petulant as to be at constant war with its own tribe, yet is remarkably sociable with mankind : in the winter it frequently makes one of the family ; and takes refuge from the inclemency of the season even by our fire sides. *Thomson** has prettily described the annual visits of this guest.

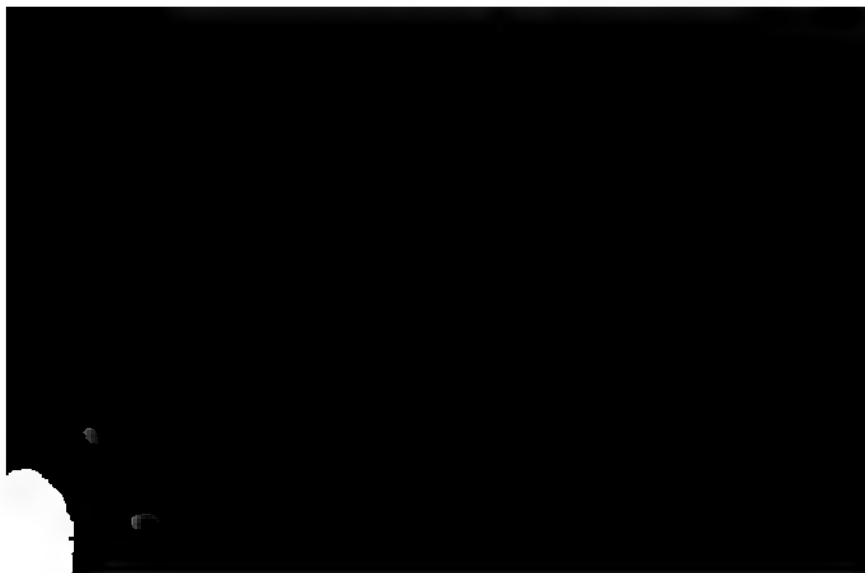
The RED-BREAST, sacred to the household gods,
Wisely regardful of th' embroiling sky,
In joyless fields, and thorny thickets, leaves
His shivering mates, and pays to trusted Man
His annual visit. Half afraid, he first

* In his Seasons, *vide Winter*, line 246.

506 BLACK-CAP WARBLER. CLASS II.

- 4. Black-cap** *Sylvia atricapilla*. S. testaceæ
 subtus cinerea, pileo ob-
 scuro. *Lath. Ind. orn.*
 808. *id. Syn.* iv. 415.
Atricapilla, *Geener*, av. 371.
 384.
Aldr. av. ii. 329.
Wil. orn. 226.
 La Fauvette à tête noire, *Cur-*
ruca atricapilla. *Brisson*
av. iii. 380. *Hist. d'ois.* v.
 125. *Pl. Enl.* 580.
Capinera. *Linan.* 56.
Olina, 9. *Scopoli.* No. 220.
Rati syn. av. 79.
Motacilla atricapilla. *Gm.*
Lin. 970.
Faun. Suec. sp. 255.
Hav-Skade. quibusdam Spik-
ke. *Br.* 228.
 Moench mit der Schwarzen
 Platte (Monk with the
 black crown) *Frisch.* i. 23.
 Schwartz plattl. *Kram.* 377.
Br. Zool. 101. plate S. f. 5.
Arct. Zool. ii. 114.

Description THIS bird is among the smallest of this tribe, scarcely weighing half an ounce. The crown of the head in the male is black; the hind part of the neck of a light ash-color; the back and coverts of the wings are of a greyish green;



CLASS II. BLACK-CAP WARBLER. 537

account is called in *Norfolk* the mock nightingale. It has usually a full, sweet, deep, loud wild pipe; yet the strain is of short continuance, and its motions are desultory: but when it sits calmly, and in earnest engages in song, it pours forth very sweet but inward melody, and expresses a great variety of soft and gentle modulations, superior perhaps to those of any of our warblers, the nightingale excepted: while it warbles, its throat is wonderfully distended.

The black-cap frequents orchards and gardens. Last spring we discovered the nest of this bird in a spruce fir, about two feet from the ground; the outside was composed of the dried stalks of the goose grass, with a little wool and green moss round the verge; the inside was lined with fibres of roots, thinly covered with black horse hair. There were in it five eggs of a pale reddish brown, mottled with a deeper color, and sprinkled with a few dark spots,

538 GREATER PETTY-CHAPS. CLASS II.

5. *Greater* *Sylvia hortensis*. S. griseo-fus. *orn.* 507. *id. Syn.* iv. 413.
Pettychaps. ca subtus rufescente-alba, *id. Sup.* ii. 234.
supercillii albidis, rectrici- *Motacilla hortensis.* *Gm.*
bus fuscis extus grisco mar- *Lin.* 255.
ginatis, extima oblique di- *Curruca.* *Brisson.* iii. 372.
midiate alba. *Lath. Ind.* *La Fauvette.* *Hist. d'ois.* v.
117. *Pl. Enl.* 579, f. 1.

THIS charming songster was first observed in Lancashire, by the late Sir Ashton Lever, and communicated by him to Dr. Latham; it has since been found in several parts of the kingdom.

Description Its length is nearly six inches; the color of the upper parts of a light brown, inclining to olive green; the quils and tail edged with the same; below the ears is a dash of ash-color;



CLASS II. LESSER PETTY-CHAPS. 539

and a little green moss outwardly, and is sometimes lined with horse hair. The eggs, generally four in number, are of a dirty white marked with rather numerous brownish specks, and running frequently together at the larger end. The young are observed to remain in the nest till they are grown very large, and almost as well feathered as their parents.

The males of this species generally arrive the last week in *April*, the females a few days later.] Ed.

Sylvia hippolais. *S. virescente-cinerea* sub^{tus} flaves^{cens}, abdomine argenteo, artubus fuscis, superciliis albidis. *Lath. ind. orn.* 507. *id. Syn.* iv. 413. *id. Sup* ii. 236.

Ficedula. *Gesner* 385.

Beccafigo, or Fig eater. *Wil. orn.* 216.

Raii syn. av. 79.

La Fauvette, curruca. *Bris.* 6. *Lesser Petty-chaps.* son av. iii. 372.

Beccafico cinerizio. *Zinn* 44.

Motacilla Hippolais. *Gm. Lin.* 954.

Faun. Suec. sp. 248.

Braune grass-mücke, Kleiner spottvogel. *Kram.* 377.

Br. Zool. 99. *Arct. Zool.* ii. 115.

THIS species is inferior in size to the former. *Description.* The inside of the mouth is red : the head, neck, back and wings are of an olivaceous ash-color;

540 HEDGE SPARROW W. CLASS II.

the quill feathers darker, edged with olive; the inner coverts of the wings yellow; the breast white, tinged with yellow; the belly of a silvery white; the tail dusky; the legs bluish.

- 7. Hodge.** *Sylvia modularis*. S. supra griseo-fusca, tectricibus alarum apice albis, pectore cærulescente-cinereo. *Lath. ind. orn.* 511. *id. Syn.* iv. 419.
Le petit Mouchet. Balon av. 375.
Potamida, obs. 12.
Passer sepium Angl. Aldr. av. ii. 329.
Carruca Eliotæ (Zaunschlipfle). *Gesner av.* 371.
Wil. orn. 215
Rail syn av 79.
La Fauvette de haye, ou la passe buse. Carruca sepiaria. Brisson av. iii. 394. *Hist. d'oï. v.* 151.
Pl. Ent. 615. f. 1.
Jarnsparf. Faun. Suec. sp. 245.
Motacilla modularis. Gm. Lin. 952.
Braunflekkige Grasmucke (Brown spotted Petty-chaps) Frisch, i. 21.
Br. Zool. plate N. 1. f. 3. 4.
Act. Zool. ii. 115.

CLASS II. HEDGE SPARROW W. 34

of a dull ash color ; the belly of a dirty white ; the sides, thighs, and vent-feathers are of a pale tawny brown ; the legs of a dull flesh color.

This bird frequents low hedges, especially those of gardens. It makes its nest in some small bush, and lays four or five eggs of a fine pale blue color ; during the breeding season it has a remarkable flirt with its wings. The male has a short but very sweet plaintive note, which it begins with the first frosty mornings, and continues till a little time in the spring. This is the *Motacilla modularis* of *Linnaeus* ; the bird which he supposes to be our hedge sparrow, and describes under the title of *Motacilla Curraca*, differs in colors of plumage as well as eggs.

plumage is also more vivid, the stroke over the eye of a lighter yellow, and a more characteristic distinction, the belly and under tail coverts are of a pale white. The bill is dusky; the upper part of the head, the back, scapulars, and upper coverts of the tail are of a lively yellow green; over the eye is a light brimstone-colored streak; the cheeks and throat are yellow; the upper part of the breast white tinged with yellow, the lower part, the belly and under tail coverts of a pure white; the quill-feathers dusky, edged on their outer webs with yellow green; the tail rather forked, colored like the quills, except the two outmost feathers which want the yellow margin; the legs yellowish brown.

It visits *England* towards the end of *April*, and departs in *September*, the males arriving



CLASS II. GOLDEN CRESTED W. 545

- Sylvia. Regulus. S. virescens*,
remigibus secundariis ex-
teriori margine flavis, me-
dio albis, vertice luteo.
Lath. Ind. orn. 548. *id.*
Syn. iv. 508.
- La Soulcie. Belon av.* 345.
Tettigon. Obs. 12.
- Regulus. Gesner av.* 727.
Fior rancio. Olina, G.
Aldr. av. ii. 290.
Wd. orn. 227.
Rail syn. av. 79.
Edw. av. 254.
Cat. Carol. app. 36, 37.
- Kratlich. Scopoli, No.* 240. 10. *Golden*
Le Poul, ou Souci, ou Roi. Crested.
telet hupé, *Calendula.*
Brisson av. iii 597. *Hist.*
d'ois. v. 363. *Pl. Enl.* 651.
f. 3.
- Motacilla Regulus. Gm.*
Lin. 995.
- Kongsfogel. Faun. Succ.*
sp. 262.
- Sommer Zaunkoenig (Sum-*
mer Wren.) Frisch, i. 24.
Goldhannel. Kram. 378.
Fugle-Konge. Br. 285.
Br. Zool. 101. plate S. f. 3.
Arct. Zool. ii. 109.

THIS is the lest of the *British* birds, weigh- *Description,*
ing only seventy-six grains. Its length is
three inches and a half; the breadth five
inches; it may readily be distinguished from
all other birds, not only by its size, but by the
beautiful scarlet mark on the head, bounded
on each side by a fine yellow line. The bill is
dusky; the feathers of the forehead are green;
from the bill to the eyes is a narrow white
line; the back and the hind part of the neck
are of a dull green; the coverts of the wings

246 GOLDEN-CRESTED W. CUCKOO II.

dusky, edged with green and tipped with white; the quill feathers and tail dusky, edged with pale green. The throat and lower part of the body white, tinged with green; the legs dull yellow; the claws very long. It frequents woods, and is found principally in oak trees. Though so small a bird it inhabits our winters, for we have frequently observed it later than *Christmas*. It is seen in autumn as far north as the *Shetland Isles*, but quits the country before winter; a vast flight for so minute and delicate a bird.

We have observed this bird suspended in the air for a considerable time over a bush in flower, whilst it sung very melodiously. The note does not much differ from that of the common wren, but is very weak.



- Sylvia Troglodytes*. S. grisea, superciliis albidis, alis nigro cinereoque undulatis. *Lath. ind. orn.* 547. *id. Syn.* iv. 500. *Le Roitelet, Regulus. Bris.* 11. *Wren.* *son av.* iii. 425. *Hist. d'ois.* v. 352. *Pl. Ench.* 551. 1. 2. *Motacilla Troglodytes. Gm.* *Lin.* 993. *Raytelet, Bous de Dieu, et Berichot. Beson av.* 343. *Faun. Suec.* sp. 261. *Trilato, obs.* 12. *Nelle-Konge. Brunnich,* 284. *Passer troglodytes. Gmel.* *av.* 651. *Schneekoning, Kouickack, Zaunschlupfrel. Kram.* 375. *Aldr. av.* ii. 392. *Schneekoenig (Snow king).* *Realino. Olina, G.* *Frisch, i.* 24. *Wil. orn.* 220. *Br. Zool.* 102. *Arct. Zool.* *Raii syn. av.* 80. *ii.* 110. *Strech; Storschek. Scopoli.* *No.* 230.

THE wren may be placed among the finest of our singing birds. It continues its song throughout the winter, excepting during the frosts. It makes its nest in a very curious manner, of an oval shape, very deep, with a small hole in the middle for ingress and egress: the external material is moss, within it is lined with hair and feathers. It lays from ten to eighteen eggs, and often brings up as many young; and, as Mr. Ray observes, it may be ranked among those daily miracles we take no

348 SEDGE WARBLER. CLASS II.

notice of, that it should feed such a number without passing over one, and that too in utter darkness.

Description. The head and upper part of the body of the wren are of a deep reddish brown; above each eye is a stroke of white; the back, and coverts of the wings, and tail, are marked with slender transverse black lines; the quill feathers with bars of black and red. The throat is of a yellowish white. The belly and sides crossed with narrow dusky and pale reddish brown lines. The tail is crossed with dusky bars.

12. *Sedge*. *Sylvia. salicaria. S. cinerea* *Famn. Succ. No. 249.*
subtus alba, superciliis al- *Brisson av. iii. 378.*
bis. Lath. ind. orn. 516. La Fauvette de roseaux.
id. Syn. iv. 430. id. Sup. Hist. d'ois. v. 142. Pl.
l. 180. Enl. 581. f. 2.
Asie consimilis Stenopelm et Willow Lark. Bc. Zool

the bill black ; the head brown, marked with dusky streaks ; over each eye is a line of pure white, over that another of black ; the cheeks brown ; the throat, breast, and belly white ; the two last tinged with yellow ; the hind part of the neck and back of a reddish brown ; the back spotted with black ; the coverts of the tail tawny ; those of the wings dusky, edged with pale brown ; the quill feathers dusky ; the tail brown, cuneiform, forming a circle when spread ; the legs dusky.

It is a most entertaining polyglot, or mocking bird ; sitting concealed in willows or reeds, in a pleasing but rather hurrying manner, it imitates the swallow, the sky-lark, the house-sparrow, &c. sings all night, and seems to leave us before winter. Makes its nest with straw and dried fibres, lined with hair ; lays five eggs, white marbled with brown.

12. *Grass-* *Sylvia. Locustella. s. fusco-* Fauvette tachetée. *FR.*
hepper. viridis maculis nigricanti- *Ent. 381. t. 3.*
 bus subtus flavescens, pec- Tit-lark, that sings like a
 tose saturatiore, cauda Grasshopper. *Will. orn.*
 cuneata rectricibus apice 207.
 mucronatis. *Lath. ind. Raii Syn. av. 70.*
orn. 515. id. Syn. iv. 429. Ray's Letters, 108.
ed. Sup. ii. 240. Br. Zool. 95. plate Q. f. 5.
Alauda minima locustæ voce. Arct. Zool. ii. 116.
Locustella, D. Johnson.

THIS bird we received out of *Shropshire*: it is the same with that *Mr. Ray* describes as having the note of the grasshopper, but louder and shriller. It is a most artful bird, will sculk in the middle, and thickest part of the hedge, and will keep running along for a hundred yards together, nor can it be forced out but with the greatest difficulty: it is from this covert that it emits its note, which so much resembles the insect, from which it derives its name, as generally to be mistaken for it. In the height of summer it chirps the whole night: its sibilous note is observed to cease about the latter end of *July*.

Description. The bill is very slender, of a dusky color; the head, and whole upper part of the body is

of a greenish brown, spotted with black; the quill feathers dusky, edged with an olive brown; the tail very long, composed of twelve sharp pointed feathers; the two middlemost are the longest, the others on each side grow gradually shorter. The under side of the body is of a dull yellowish white, darkest about the breast; the legs are of a dirty white; the hind claw short and rather crooked.

<i>Sylvia arundinacea</i> . S. supra	<i>Motacilla arundinacea</i> . Gm. 14 Reed.
olivaceo-fusca, subtus al-	Lin. 992.
bida, loriet orbitis fusco-	Lesser Reed Sparrow. Wil.
albescentibus, angulo car-	orn. 144.? Raii syn. 66.
pi subtus luteo-fulvo, cau-	47.?
da subcuneata fusca. Lath.	Lightfoot in Ph. Trans. lxxv.
Ind. orn. 810. id, Syn.	8. Tab. 1.
Sup. 184.	

THE head, upper part of the body, and co-Description
verts of the wings of this species, are olive
brown; the primaries and tail of the same co-
lor, but darker; from the bill to each eye is
a stripe of tawny white feathers; the chin
white; the breast and belly white, shaded with
tawny; the tail slightly cuneated. The size
nearly equal to that of the sedge warbler.

It was discovered by Mr. *Lightfoot*, on the banks of the *Colne*, near *Uxbridge*, where it makes its nest externally with dry stalks, lined with the tufts of the common reed, mixed with a few hairs. It usually is suspended between three or four reeds; sometimes to the branches of the water dock. This bird lays commonly four eggs of a dirty white, stained with dull olive-colored spots. The note of this species is simple and plaintive.



CLASS II: WHEAT-EAR-WARBLER. 339

•• With party colored Tails.


- Sylsia**, **Œnanthe**. S. dorso cano, fronte linea supra oculos nropygio basique caudæ albis, per oculos fascia nigra. *Lath. ind. orn.* 529. *id. Syn.* iv. 465. 75. *id. Sup.* i. p. 182. *Belon av.* 352. **Œnanthe**. *Gesner av.* 629. *Aldr. av.* ii. 332. Wheat-ear, Fallow-smich, White-tail. *Wil. orn.* 233. *Raii syn. av.* 76. **Motacilla** **Œnanthe**. *Gm. Lin.* 966. **Stensquetta**. *Faun. Suec. sp.* 15. *Wheat-ear.* 254. Le Cul blanc, Vitrec, ou Moteux, Vitiflora. *Brisson av.* iii. 449. *Hist. d'oïis. v.* 327. *Pl. Enl.* 554. f. 1. 2. Culo bianco, Fornarela, Petragiola. *Zinan.* 41. *Norvegis* Steendolp, Steen Squette, Steengylpe. *Brunnich,* 276. Steinschwaker, Steinschnapperl. *Kram.* 374. Bella. *Scopoli,* No. 230. *Br. Zool.* 102. plate S. 1. f. 5. 6. *Arct. Zool.* ii. 117.

THE wheat-ear begins to visit us about the middle of *March*, and continues coming till the beginning of *May*: we have observed that the females arrive about a fortnight before the males. They frequent warrens, downs, and the edges of hills, especially those that are fenced with stone walls. They breed in the latter, in old rabbit burrows, cliffs, and frequently

554 WHEAT-EAR WARBLER. CLASS H.

under old timber: their nest is large, made of dried grass, rabbit's down, a few feathers, and horse hair; and they lay from six to eight eggs, of a light blue color.

They grow very fat in autumn, and are esteemed a delicacy. Their chief autumnal rendezvous in *Sussex* is about *Eastbourn*, where they are taken by the shepherds in great numbers, in snares made of horse hair, placed under a long turf: being very timid birds, the motion of a cloud, or the appearance of a hawk, will drive them for shelter into those traps. The numbers annually ensnared in that district alone, amount to about 1840 dozen, which sell usually at sixpence *per* dozen; and what appears very extraordinary, the numbers that return the following year do not appear to be lessened, as we are assured by a very intelligent person resident near that place.



CLASS II. WHEAT-EAR WARBLER. 533

and which is not only a favorite food of that insect, but the plant on which it deposits its eggs.

Wheat-ears are much fatter in a rainy season than a dry one, for they not only feed on insects, but on earth worms, which come out of the ground in greater numbers in wet weather than in dry.

The head and back of the male are of a *Description* light grey, tinged with red; over each eye is a white line; beneath that is a broad black stroke, passing across each eye to the hind part of the head; the rump and lower half of the tail are white; the upper half black; the under side of the body is white, tinged with yellow; on the neck it inclines to red; the quit feathers are black, edged with reddish brown. The colors of the female are more dull; it wants that black stroke across the eyes, and the bar of white on the tail is narrower. These birds disappear in *September*, at least from the northern parts of this kingdom; but in *Hampshire* they continue the whole winter, as they do in *Sussex*.

Great quantities of these birds are sent potted to *London*, and numbers dressed fresh in

336 WHEAT-EAR WARBLER. CLASS II.

the country. They are roasted, wrapped up in vine leaves, on account of the great tenderness of the flesh, insomuch that it is even difficult to pluck without bruising them.

<i>Var. A.</i> <i>Grey.</i>	<p><i>Motacilla Cenanthe.</i> <i>β. S.</i> <i>orn.</i> 530. <i>Syn.</i> iv. 468. <i>corpore supra fulvo albi-</i> <i>Cul blanc gris. Brisson av.</i> <i>doque vario, collo infimo</i> <i>iii. 452. tab. 21. fig. 2.</i> <i>griseo maculato, rectri-</i> <i>Hist. d'oïis. v. 244.</i> <i>cibus duabus intermediis</i> <i>Br. Zool. app.</i> <i>toto nigris. Lath. ind.</i></p>
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THE following variety was shot near *Uxbridge*.

Description. The crown and back were of a tawny brown; the under side of the neck of a dull brownish yellow; from the bill to eye passed an obscure dusky line; the quill feathers and secondaries were black, edged with tawny and

CLASS II. WHIN-CHAT WARBLER. 537

Sylvia rubetra. <i>S. nigricans,</i>	<i>Wil. orn.</i> 234.	16. <i>Whin-</i> <i>chat.</i>
<i>superciliis albis, macula</i>	<i>Raii syn. av.</i> 76.	
<i>alarum alba, gula pecto-</i>	<i>Motacilla rubetra. Gm. Lin.</i>	
<i>requae flavescente. Lath.</i>	967.	
<i>ind. orn.</i> 525. <i>id. Syn.</i> iv.	<i>Faun. Suec. sp.</i> 255. <i>Sco-</i>	
454.	<i>poli, No.</i> 237.	
Le Tarier. <i>Belon av.</i> 361.	<i>Gestetenschlager. Kram.</i>	
Rubetra. <i>Gesner av.</i> 729.	375.	
Le grand Traquet, ou le Ta-	Grosser Fliegenfuenger	
rier. <i>Brisson av.</i> iii. 432.	(great Fly-catcher). <i>Frisch</i>	
<i>tab.</i> 24. <i>fig.</i> 1. <i>Hist. d'oïis.</i>	i. 22.	
<i>v.</i> 224. <i>Pl. Enl.</i> 678. <i>f.</i>	<i>Br. Zool.</i> 103. plate S. 2. <i>f.</i>	
2.	3. 4. <i>Arct. Zool.</i> ii. 118.	

THIS is in the north of *England*, also a bird of passage; we are not certain whether it quits this island, but are rather inclined to think it only shifts its quarters.

The head and back are of a pale reddish *Description.* brown, regularly spotted with black; over each eye is a narrow white stroke, beneath that is a broad bed of black, which extends from the bill to the hind part of the head; the breast is of a reddish yellow; the belly paler; the quill feathers are brown, edged with a yellowish brown; the upper part of the wing is marked with two white spots; the lower part of the

558 STONE-CHAT WARBLER. CLASS H.

tail is white, the two middle feathers excepted, which are wholly black; the upper part of the others are of the same color.

The colors of the female are far less agreeable; in lieu of the white and black marks on the cheeks, is one broad pale brown one; and the white on the wings is in far less quantity than on those of the male.

It often winters in *Italy*.

- | | |
|---|---|
| 17. <i>Stone.</i> <i>Sylvia rubicola</i> : S grisea sub-
<i>chat.</i> <i>tus rufescens</i> , jugulo fascia
alba, loris nigris, uropygio
maculaque alarum alba.
<i>Hath. ind. orn.</i> 523: <i>id.</i>
<i>Syn.</i> iv. 448:
<i>Le Traquet</i> ou Groulard.
<i>Belon</i> av. 360.
<i>Rubetra</i> : <i>Aldr.</i> av. ii. 325.
<i>Stone-smich</i> , <i>Stone-chatter</i> , | <i>LeTraquet</i> , <i>Rubetra</i> . <i>Bris-</i>
<i>son</i> av. iii. 428. <i>tab.</i> 23.
<i>fig.</i> 1. <i>Hist. d'ois.</i> v. 218.
<i>Pl. Enl.</i> 678. f. 1.
<i>Pontz.</i> <i>Scopoli</i> , N ^o . 236:
<i>Occhia di due</i> . <i>Zanon.</i> 58.
<i>Motacilla Rubicola</i> : <i>Gm.</i>
<i>Lin.</i> 969.
<i>Cristoff.</i> <i>Kram.</i> 375.
<i>Br Zool.</i> 103, plate 8. 2. f. |
|---|---|



CLASS II. STONECHAT WARBLER. 509

perches frequently on some bush, chattering incessantly.

The head, neck, and throat, are black; but *Description* on both sides the latter is a white bar, so that it appears at first sight to be encircled with white; the feathers on the back are black edged with tawny; the lower part of the back just above the rump is white; the end and exterior side of the two outmost feathers of the tail are of a pale rust-color, the rest are black; the breast is of a deep reddish yellow; the belly of a lighter hue; the quill feathers are dusky edged with dull red; those next the body are marked with a white spot near their bottoms; the coverts of the wings are adorned with another. The head of the female is ferruginous spotted with black; and the colors in general less vivid. In both sexes the legs are black; which also is the character of the two preceding species, as well as that next to be described.

18. *White-* *Sylvia cinerea*. *β*. S. supra
throat.

rufo-cinerea, subtus rufo-
alba, gula alba, rectrice
extima extus toto intus
dimidiato alba. *Lath. ind.*
orn. 515. *id. Syn.* iv. p.
428. 19.

Will. orn. 236.

Rail syn. av. 77.

La Mesange cendrée, *Paros*
cinereus. *Brisson av.* iii.
549.

Fauvette grise ou la Gri-
sette. *Hist. d'ois.* 132.

Pl. Enl. 579. f. 3.

Motacilla Sylvia? *Gm. Lin.*
958.

Kogsnetter, *Mesar. Faun.*
Succ. sp. 250.

Br. Zool. 104. plate 8. f. 4.

Arct. Zool. ii. 118.

THIS frequents our gardens in the summer
time; in the winter it leaves us. It builds in
low bushes near the ground, making its nest
externally of the tender stalks of herbs and
dry straw, the middle part of fine bents and
soft grass, the inside of hair. It lays five eggs
of a whitish green color, speckled with black

CLASS II. LESS. WHITE-THROAT W. 561

The head of this bird is of a brownish ash- *Description.*
color; the throat white; the breast and belly
white tinged with red; (in the female wholly
white;) the back inclines to red; the lesser
coverts of the wings are of a pale brown; the
greater dusky, edged with tawny brown; the
quill feathers dusky, edged with reddish brown;
the tail the same, except the upper part of the
interior side and whole exterior side of the out-
most feather, which are white; the legs are of
a yellowish brown.

[*Sylvia Sylviella. S. cinereo-*
fusca, subtus sordide alba,
rectricibus duabus interme-
diis brevioribus subulatis.

Lath. Ind. orn. 515. id. 19. Lesser
Sup. i. 185. t. 113. id. White-
Sup. ii. 239. throat.

MR. *Montagu* is of opinion that this species
is confined to the eastern part of *Great Britain*.
It was first observed by the Rev. *John Light-*
foot. The crown and upper part of the body *Description.*
are of a pale cinereous brown; from the chin
to the vent of a dull white; the tail long, very
slightly forked, of the same color with the
back. It is rather less than the preceding

562 DARTFORD WARBLER. CLASS II.

species; its bill also is shorter, the legs are darker, the whole under parts of the plumage much whiter, and the whole upper parts do not possess the least appearance of rufous brown. The female does not differ in plumage from the male.

This species appears in *May* and *June*, and builds in brambles and small bushes: the nest is composed of dry bents mixed with wool, and lined with finer bents and a few hairs. The eggs are white, dotted with brown, and marked with irregular blotches of a paler brown.] ED.

- | | |
|---|-------------------------------------|
| 20. <i>Dartford</i> <i>Sylvia dartfordiensis</i> . S. ca- | <i>Motacilla provincialis</i> , Gm. |
| turate rufo-lusca subtus | Lin. 958. |
| ferruginea, abdomine me- | Le Pitchon de Provence. |
| dio albo, palpebris, iridi- | Hist d'ois. v. 158. Pl. |
| busque coerulesc. pedibus | Ent 655 f. 1. |



CLASS II. DARTFORD WARBLER. 563

tinged with a dull yellow; the throat, under side of the neck, the breast and belly deep ferruginous; the middle of the belly white; the quill feathers dusky edged with white; the bastard wing white; the exterior side of the interior feather of the tail white, the rest dusky, and long in proportion to the size of the bird; the legs yellow.

A pair of these were shot on a common near *Dartford*, in *April 1773*, and communicated to me by *Mr. Latham*; they fed on flies, which they sprung on from the furze bush they sat on, and then returned to it again.

GENUS XXVIII. TITMOUSE.

BILL strait, short, hard, strong, sharp-pointed,
a little compressed.

NOSTRILS round covered with bristles.

TONGUE as if cut at the end, terminating
with two or three bristles.

1. *Great. Parus. major. P. viridi-oli-* Snitza. *Scopoli, No. 242.*
vaceus subtus flavescens, Parus major. Gm. Lin. 1006.
capite nigro temporibus Taig-oxe. *Faun. Suec. sp.*
albis, nucha lutea. Lath. 265.
ind. orn. 562. id. Syn. iv. Le grosse Mesange ou la
536. Charbonniere. *Brisson*
Nonette ou Mesange. Belon av. iii. 539.
av. 376. *Hist. d'ois. v. 392. Pl.*
Parus major. Gesner av. Enl. 3. f. 1.
640. *Musvit. Brunnich, 287.*
Aldr. av. ii. 319. Kohlmeise. *Kram. 378.*
Sparvuzola Parussola Oli. *Fisch. i. 13.*

the whole tribe feed on insects, which they find in the bark of trees; in the spring they do a great deal of mischief in the fruit garden, by picking off the tender buds. Like wood-peckers they are perpetually running up and down the bodies of trees in quest of food. The bird has three chearful notes, which it begins to utter in the month of *February*.

The head and throat of this species are *Description.* black; the cheeks white; the back green; the belly of a yellowish green, divided in the middle by a bed of black, which extends to the vent; the rump is of a bluish grey. The quill feathers are dusky, edged partly with blue, partly with white; the coverts blue, the greater tipt with white. The exterior sides of the outmost feathers of the tail are white; the exterior sides of the other bluish; their interior sides dusky; the legs lead color. The toes are divided to the origin; and the back toe of the whole genus is very large and strong.

It appears in *Italy* towards the end of *April*, and retires, as most of the titmice do in that country, in *October*.

2. *Blue.* *Parus. cœruleus.* P. olivaceo
virescens subtus luteus, re-
migibus cœrulescentibus,
primoribus margine exte-
riore albis, fronte alba,
vertice cœruleo. *Lath.*
ind. orn. 566. *id. Syn.* iv.
543.
Belon av. 369.
Parus cœruleus. Gesner av.
641.
Aldr. av. ii. 321.
Blue Titmouse, or Nuu.
Wil. orn. 242.
Rait syn. av. 74.
La Mesange Bleue. Brisson
av. iii. 544. *Hist. d'oïv.* v.
413. *Pl. Enl.* 3. f. 2.
Blavassnitsa, Blau mandlitz.
Scopoli, No. 244.
Parozolino, o Fratino. Sd.
nan. 76.
Parus cœruleus. Gm. Lin.
1008.
Blamœes. Faun. Suec. sp.
267.
Blaacmeise. Br. 288.
Blaumeise. Kram. 379.
Frisch, i. 14.
Br. Zool. 114. plate W. f.
S. Arct. Zool. ii. 124.

THIS bird frequents gardens, and does great injury to fruit trees, by bruising the young buds in search of the insects that lurk under them; it breeds in holes of walls, and lays



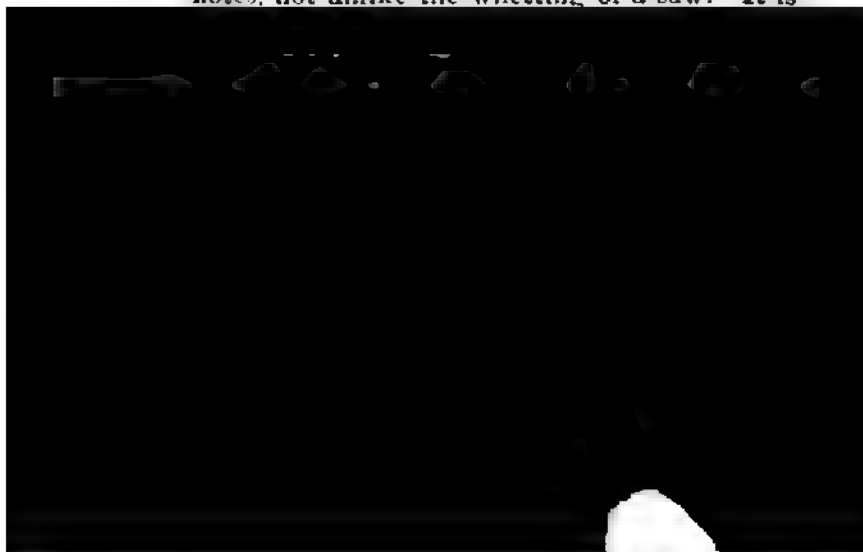
former marked transversely with a white bar;
the legs are of a lead color.

- | | |
|--|--|
| <p>Parus. ater. P. dorso cinereo, capite nigro, occipite pectoreque albo. <i>Lath. ind. orn.</i> 564. <i>id. Syn.</i> iv. 540.</p> <p>Quatriesme espece de Mesange. <i>Belon av.</i> 370.</p> <p>Parus ater. <i>Gesner av.</i> 641. <i>Aldr. av.</i> ii. 321. <i>Wil. orn.</i> 241. <i>Raii syn. av.</i> 73.</p> <p>Spermiese, Kreuzmeise. <i>Kram.</i> 379.</p> | <p>Tannen Meise (Pine Tit. 3. Cole. mouse). <i>Frisch,</i> i. 13.</p> <p>La Mesange a tete noire, <i>Parus atricapillus.</i> <i>Brisson av.</i> iii. 551.</p> <p>La petite charbonniere. <i>Hist. d'oïs.</i> v. 400. <i>Cat. Carol. app.</i> 37.</p> <p>P. ater. <i>Gm. Lin.</i> 1009. <i>Faun. Suec. sp.</i> 268. <i>Scopoli,</i> No. 215.</p> <p>Br. Zool. 114. <i>Arct. Zool.</i> ii. 121.</p> |
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THE head of the cole titmouse is black, *Description.* marked on the hind part with a white spot; the back is of a greenish grey; the rump more green; the tail and wings dusky; the exterior feathers edged with green; the coverts of the wings are of a dusky green; the lowest tip with white. For a farther account we beg leave to refer to the next description.

4. *Marsh.* *Parus palustris*. *P. capite nigro*, dorso cinereo, temporibus albis. *Lath. ind. orn.* 565. *id. Syn.* iv. 541. *id. Sup.* i. 180.
- Parus palustris.* *Gesner av.* 641.
- Paronzino.* *Aldr. av.* ii. 32.
- Marsh Titmouse*, or *Black cap.* *Wil. orn.* 241.
- Raii syn.* av. 73.
- Fratino palustre.* *Zinn.* 77.
- La Mesange de Marais* ou la
- Noette cendrée.* *Brisson av.* iii. 555. *Hist. d'ois.* v. 403. *Pl. Enl.* 3. f. 3.
- P. palustris.* *Gm. Lén.* 1009.
- Entita*, *Tomlinge.* *Faun. Suec. sp.* 269. *Scopoli, No.* 246.
- Asch Meise* (*Ash Titmouse*). *Frisch*, i. 13.
- Hundsmeise.* *Kram.* 379.
- Norvegis Graae-Meise.* *Brunnich*, 190.
- Br. Zool.* 114. plate W. f. 3.
- Arct. Zool.* ii. 125.

THIS species is called by *Gesner* the marsh titmouse; because it frequents wet places. With us it inhabits woods, and seldom infests our gardens: early in *February* it emits two notes, not unlike the whetting of a saw. It is



CLASS II. LONG-TAILED TITMOUSE. 569

the chin: 6th, it wants the white spot on the coverts of the wings. This last distinction does not hold in general, as the subject figured in the *British Zoology* had those spots; yet wanted that on the hind part of the head.

Le Comte de Buffon thought this only a variety of the preceding species: certain it is that the haunts of this and of the former differ, but each agree in being equally prolific with others of the genus.

Parus. caudatus. P. albo roseo nigroque longitudinaliter varius, vertice albo, cauda longiore. Lath. ind. orn. 569. id. Syn. iv. 550. id. Sup. i. 190.

Belon av. 368.

Parus caudatus. Gesner av. 642.

Monticola. Aldr. av. ii. 319.

Wil. orn. 342.

Rati syn. av. 74.

Pendolino, Paronzino. Zinn. 77.

Gangartza. Scopoli, No. 5. Long-tailed. 247.

La Mesange a longue queue, Parus longicaudus. Brisson av. iii. 570. Hist. d'ois. v. 437. Pl. Enl. 502. f. 3.

Parus caudatus. Gm. Lin. 1010.

Alhtita. Faun. Suec. sp. 83. Belzmeise Pfannenstiel, Kram. 379.

Langschwäntzige Meise. Frisch, i. 14.

Br. Zool. 110. W. f. 6. Arct. Zool. ii. 125.

THE length is five inches and a quarter; *Description*

370 LONG-TAILED TITMOUSE. CLASS II.

the breadth seven inches. The bill is black, very short, thick, and very convex, differing greatly from all others of the titmouse kind; the base is beset with small bristles; the irides are of a hazel color. The top of the head, from the bill to the hind part, is white, mixed with a few dark grey feathers; this bed of white is entirely surrounded with a broad stroke of black, which, rising on each side the upper mandible, passes over each eye, unites at the hind part of the head, and continues along the middle of the back to the rump; the feathers on each side of this black stroke are of a purplish red, as are those immediately incumbent on the tail. The covert feathers of the wings are black; the secondary and quill feathers are dusky, the largest of the latter wholly so; the lesser and more remote have their exterior sides edged with white.

The tail is the longest in proportion to the bulk of any *British* bird, being in length three inches; the form of it is like that of a magpie, consisting of twelve feathers of unequal lengths, the middlemost the longest, those on each side growing gradually shorter; the exterior sides, and the top of the interior sides of the three

CLAMMII. LONG-TAILED TITMOUSE. 571

outmost feathers are white; the rest of the tail black. The cheeks and throat are white: the breast and whole under side white, with a cast of red. The legs, feet, and claws, are black.

It forms its nest with great elegance, of an *Nest.* oval shape, and about eight inches deep; near the upper end is a hole for admission; the external materials are mosses and lichens, curiously interwoven with wool; within it is lined very warmly with a thick bed of feathers; it lays from ten to seventeen eggs. The young follow the parents the whole winter; and from the slimness of their bodies, and great length of tail, appear, while flying, like so many darts cutting the air. They are often seen passing through our gardens, going progressively from tree to tree, as if on their road to some other place, never making any halt.

It is seen in *Italy* flying about during the whole winter.

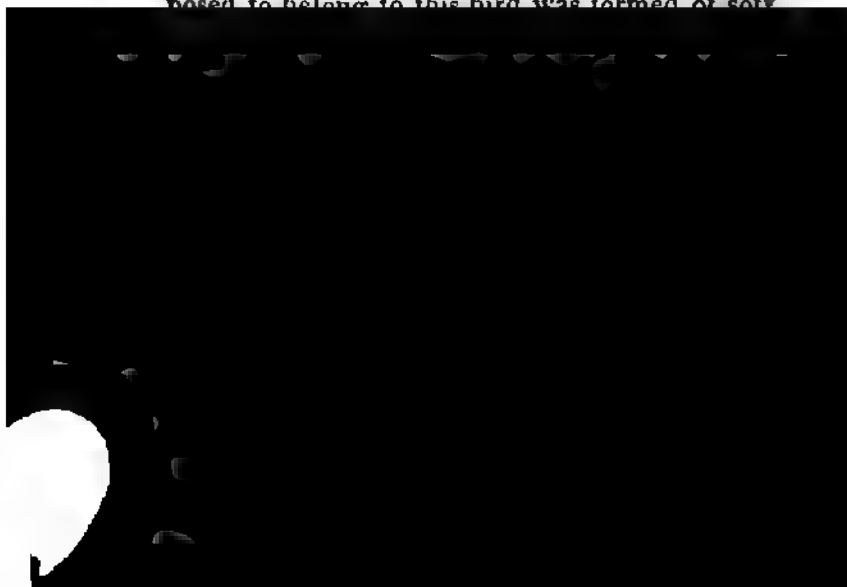
572 BEARDED TITMOUSE. CLASS II.

6. *Bearded*. *Parus biarmicus*. *P. rufus*,
 vertice cano, canda corpo-
 re longiore, capite barba-
 to, crasso nigro. *Lath.*
Ind. orn. 570. *id. Syn.* iv.
 552. *id. Sup.* 190.
Lest Butcher Bird. *Edw.*
av. 55.
Bearded Titmouse. *Aldr.*
av. i. tab. 48.
Scopoli, No. 241.
- La mesange barbue, ou le*
moustache, Parus barba-
tus. *Brisson av.* iii. 567.
Hist. d'ois. v. 418. *Pl.*
Enl. 618. f. 1. 2.
Parus biarmicus. *Gm. Lén.*
 1011.
Lest Butcher Bird. *Br.*
Zool. ed. 2d. i. 165.
Br. Zool. 74. plate C. 2.
Arct. Zool. ii. 126.

THIS species is found in the marshes near *London*: we have seen it near *Gloucester*; it is also frequent among the great tracts of reeds near *Cowbit* in *Lincolnshire*, where I suspect it breeds.

Nest.

The nest is not accurately known. One supposed to belong to this bird was formed of soft



CLASS II. BEARDED TITMOUSE. 573

is very common among the reeds,* and is said to be of the same shape as that of the long tailed titmouse, but rather larger.

The bill is short, strong, and very convex, *Description* of a box color; the irides pale yellow; the head is of a fine grey; on each side of the bill, beneath the eye, is a long triangular tuft of black feathers; the chin and throat are white; the middle of the breast flesh colored; the sides and thighs of a pale orange; the hind part of the neck and the back are of an orange bay; the secondary feathers of the wings are black edged with orange; the quill feathers dusky on their exterior, white on their interior sides; the lesser quill feathers tipped with orange. The tail is two inches and three quarters long; the two middle feathers are largest, the others gradually shorten on each side, the outmost of which are of a deep orange color. The vent-feathers of the male are of a pale black; of the female of a dull orange. The legs are of a deep shining black.

The female wants the black mark on each *Female*. cheek, and the fine flesh color on the breast;

* Dr. Pallas MS.

374 CRESTED TITMOUSE. CLASS II.

the crown of the head is of a brownish rust color, spotted with black; the outmost feathers of the tail are black tipped with white.

7. *Crested.* *Parus cristatus.* P. griseo- *Brisson av. iii. 558.*
rufescens cristatus, colla- *La Menage happé. Hist.*
ri nigro, ventre albo. *Vol. v. 447. Pl. Enl.*
Lath. ind. orn. 567. id Syn. *502. f. 1.*
iv. 558. id. Sup. i. 190. *Rati syn. av. 74.*
Gm. Lén. 1005. *IVL. orn. 242.*

Description. **T**HE front and cheeks of this species are white; the chin and throat black; the head highly crested with black feathers edged with white; the cheeks branded beneath with black; from the throat to the belly white; the back, wings, and tail, of a rufous dark grey. Its size that of the Blue Titmouse.

As yet it has only been discovered in Scot-



CLASS II. CHIMNEY SWALLOW. 578

GENUS XXIX. SWALLOW.

BILL short, weak.

MOUTH very wide.

LEGS short, weak.


- | | |
|---|---|
| <i>Hirundo rustica</i> . <i>H. nigro-cærulescens</i> subtus albida, fronte gulaque castaneis, rectricibus lateralibus macula alba notatis. <i>Lath. Ind. orn.</i> 592. <i>id. Syn. iv.</i> 361. <i>id. Sup. i.</i> 192. | <i>d'ois.. vi.</i> 591. <i>Pl. Enl. 1. Chimney.</i> 543. <i>f. 1.</i> |
| <i>La petite Hirondelle</i> , <i>Belon av.</i> 373. | <i>Hirundo rustica</i> . <i>Gm. Lin.</i> 1015. |
| <i>Hirundo domestica</i> . <i>Gesner av.</i> 548. | <i>Ladu Swala</i> . <i>Fenn. Suec. sp.</i> 270. |
| <i>Aldr. av. ii.</i> 294. | <i>Forstue-Svale, Mark-Svale. Brunnich,</i> 289. |
| <i>Rondone</i> . <i>Zinn.</i> 47. | <i>Haus-Schwalbe</i> . <i>Friech, i.</i> 17. |
| <i>L'Hirondelle de Cheminée</i> . <i>Brisson av. ii.</i> 486. <i>Hist.</i> | <i>Haus Schwalbe</i> . <i>Kram.</i> 380. |
| | <i>Laustaza. Scopoli, No.</i> 249. |
| | <i>Rail syn. av.</i> 71. |
| | <i>House or Chimney Swallow. Wil. orn.</i> 212. |
| | <i>Br. Zool.</i> 96. <i>Arct. Zool. ii.</i> 127. |

THIS species appears in Great Britain nearly twenty days before the martin, or any other of the swallow tribe. They leave us the latter end of *September*; and for a few days previous to their departure, assemble in vast flocks on

576 CHIMNEY SWALLOW. CLASS II.

house tops, churches, and even trees, from whence they take their flight. It is now known that swallows fix their winter quarters in *Senegal*, and possibly they may be found along the whole *Morocco* shore. We are indebted to *M. Adanson** for this discovery, who first observed them in the month of *October*, after their migration from *Europe*, on the shores of that kingdom; but whether it was this species alone, or all the *European* kinds, he is silent.

The name of chimney swallow may almost be confined to *Great Britain*, for in several other countries they chuse different places for their nests. In *Sweden*, they prefer barns, so are styled there *Ladu-Swala*, or the barn swallow; and in the hotter climates they make their nests in porches, gateways, galleries, and open halls.



CLASS II. CHIMNEY SWALLOW. 577

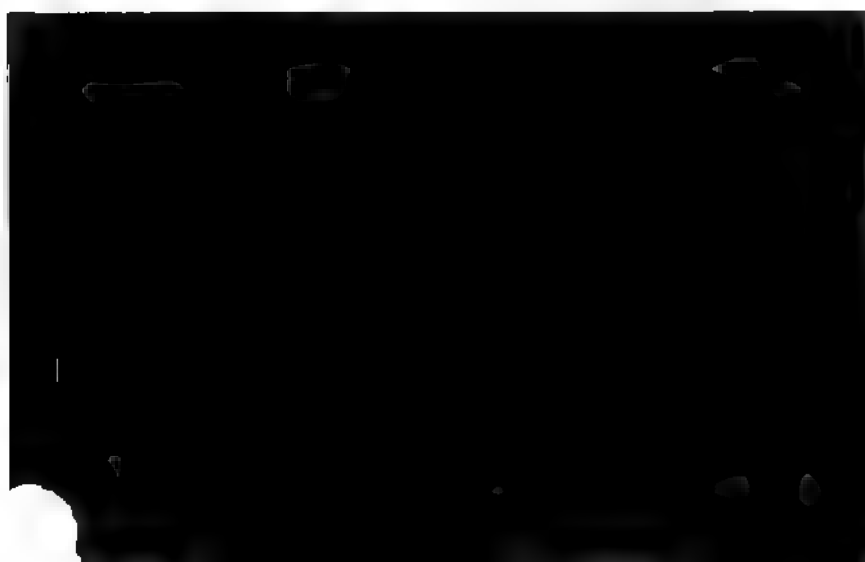
most resplendent in the male; the breast and belly white, that of the male tinged with red; the tail black; the two middle feathers plain; the others marked transversely near their ends with a white spot. The exterior feathers of the tail are much longer in the male than in the female.

Their food is the same with that of the others of the genus, viz. insects; for the taking of which in their swiftest flight, nature hath admirably contrived their several parts; their mouths are very wide; their wings are long, and their tails are forked, to enable them to turn the readier in pursuit of their prey. This species, in our country, builds in chimneys, and makes its nest of clay mixed with straw, leaving the top quite open. It lines the bottom with feathers and grasses; and usually lays from four to six eggs, white speckled with red; but by taking away one of the eggs daily, it will successively lay as far as nineteen, as Doctor *Lister* has experienced. It breeds earlier than any other species. The first brood are observed to quit the nest the last week in *June*, or the first in *July*; the last brood towards the middle or end of *August*. The nest being fixed

578 CHIMNEY SWALLOW. CLASS II.

five or six feet deep within the chimney, it is with difficulty that the young can emerge. They even sometimes fall into the rooms below; but as soon as they succeed, they perch for a few days on the chimney top, and are there fed by their parents. Their next essay is to reach some leafless bough, where they sit in rows, and receive their food. Soon after they take to the wing, but still want skill to seize their own prey. They hover near the place where their parents are in chase of flies, attend their motions, meet them, and receive from their mouths the offered sustenance.

It has a sweet note, which it emits in *August* and *September*, perching on house tops.

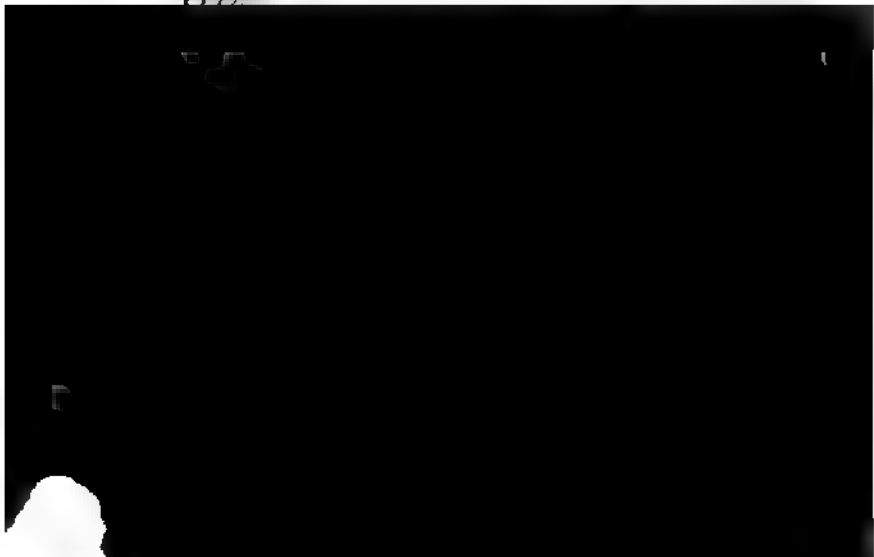


- | | |
|--|---|
| <p>Hirundo urbica. <i>H. nigro-cærulescens subtus alba, rectricibus immaculatis.</i> <i>Lath. ind. orn.</i> 573. <i>id. Syn. iv.</i> 564. <i>id. Sup. i.</i> 192.
 Le Martinet. <i>Belon av.</i> 380.
 Hirundo sylvestris. <i>Gesner av.</i> 564. <i>Frisch, i.</i> 17. <i>Aldr. av. ii.</i> 311.
 Martin, Martlet, or Martinet. <i>Wil. orn.</i> 213.
 <i>Raii syn. av.</i> 71.
 Rondone minore, e Grasso-
 <i>lo. Zinan.</i> 48.
 Huda arvik. <i>Scopoli, No.</i> 250.</p> | <p>La petite Hirondelle, ou le 2. Martin.
 Martinet a cul blanc.
 <i>Brisson av. ii.</i> 490. <i>Hist. d'ois. vi.</i> 614. <i>Pl. Enl.</i> 542. <i>f.</i> 2.
 Hirunda urbica. <i>Gm. Lin.</i> 1017.
 Hus-Swala. <i>Faun. Suec. op.</i> 271.
 <i>Speyerl. Kram.</i> 380.
 <i>Danis, Bye v. Tagskiæg-Svale, Langelandis, Rive.</i>
 <i>Br.</i> 290.
 <i>Ph. Tr.</i> 1774. <i>p.</i> 196.
 <i>Br. Zool.</i> 96. <i>plate Q. f.</i> 2. <i>p.</i> 196. <i>Arct. Zool. ii.</i> 128.</p> |
|--|---|

THE Martin is inferior in size to the former *Description*. species, and its tail is much less forked. The head and upper part of the body, except the rump, is black glossed with blue; the breast, belly, and rump, are white; the feet are covered with a short white down. This is the second of the swallow kind that appears in our country. It builds under the eaves of houses, with the same materials, and in the same form as the house swallow, only its nest is covered above, having only a small hole for admit-

tance. We have also seen this species build against the sides of high cliffs over the sea. For the time that the young keep the nest, the old one feeds them, adhering by the claws to the outside; but as soon as they quit it, feeds them flying, by a motion quick and almost imperceptible to those who are not used to observe it.

It is a later breeder than the preceding by some days; but both will lay twice in the season, and the latter brood of this species have been observed to come forth so late as the eighteenth of *September*; yet that year (1766) they entirely quitted our sight by the fifth of *October*; not but they sometimes continue here much later: the martins and red wing thrushes having been seen flying in view on the seventh of *November*. Nestlings have been remarked in *Hampshire* as late as the 21st of *October*, 1772.



Hirundo riparia. H. cinerea, gula abdomineque albis. <i>Lath. ind. orn.</i> 575. <i>il.</i> <i>Syn.</i> iv. 568.	<i>Cat. Carol. app.</i> 37. Rondone riparia. <i>Sinan.</i> 49. Hirundo riparia. <i>Gm. Lin.</i> 1019.	3. Sand.
L'Hirondelle de rivage. <i>Be-</i> <i>lon av.</i> 379.	Strand-swala, Back swala. <i>Faun. Suec. sp.</i> 273.	
Hirundo riparia, seu Drepa- nis. <i>Gesner av.</i> 565.	<i>Danis, Dig-v.</i> Jord-svale, Soil-baake. <i>Norveg. Sand</i> <i>Rænne. Br.</i> 291.	
Dardanelli. <i>Aldr. av. ii.</i> 312.	Ufer-Schwalbe (Shore Swal- low.) <i>Frisch, i.</i> 18.	
Sand Martin, or Shore Bird. <i>Wil. orn.</i> 213.	Gestetten-schwalbe. <i>Kram.</i> 381.	
<i>Raii syn. av.</i> 71.	<i>Br. Zool.</i> 97. plate Q. f. 1.	
L'Hirondelle de rivage. <i>Bris-</i> <i>son av. ii.</i> 506. <i>Hist. d'ois.</i> <i>vi.</i> 632. <i>Pl. Enl.</i> 513. <i>f.</i> 2.	<i>Arct. Zool. ii.</i> 129.	

THIS is the lest of the genus that frequents *Great Britain.* The head and whole upper part of the body are mouse colored; the throat white, encircled with a mouse colored ring; the belly white; the feet smooth and black. *Description.*

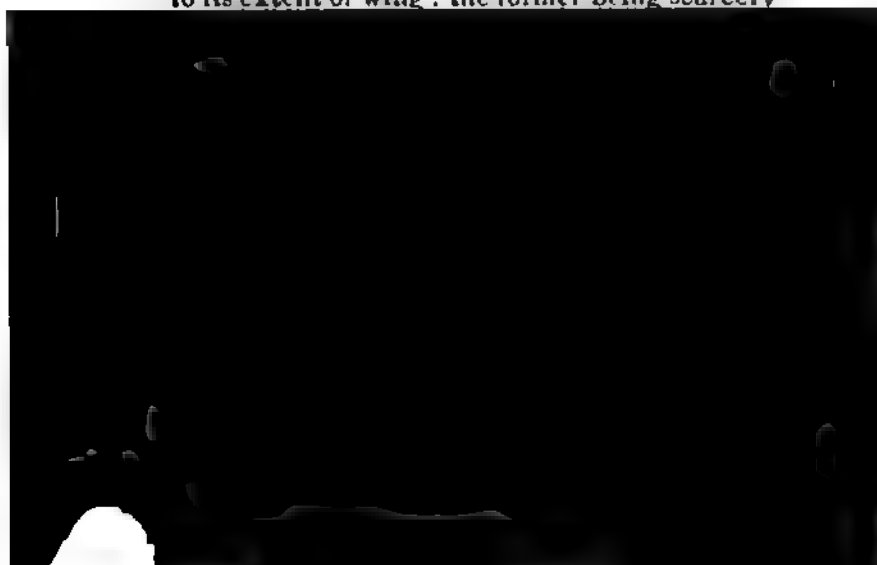
It builds in holes in sand pits, and in the banks of rivers, penetrating some feet deep into the bank, boring through the soil in a wonderful manner with its feet, claws, and bill. It makes its nest of hay, straw, &c. and lines it with feathers: it lays five or six white eggs. It is the earliest of the swallow tribe in

588 SWIFT SWALLOW. CLASS II.

bringing out its young, and arrives in *England* about the same time as the Chimney Swallow.

4. *Swift*. *Hirundo Apus*. H. nigricans, Le Martinet. *Brisson av.*
gula alba, digitis omnibus H. 514. *Hist. d'ois.* vi.
quatuor anticis. *Lath.* 643. *Pl. Enl.* 542. f. 1.
Ind. orn. 582. *Id. Syn.* iv. *Hirundo Apus.* *Gm. Linn.*
 384. 1020.
La grande Hirondelle. Mou- *Ring-swala.* *Famn. Succ. sp.*
turdier ou grand Martinet. 272.
Belon av. 377. *Steen, Kirke-v. Sme-Svale.*
Apus. *Gesner av.* 166. *Br.* 292.
Aldr. av. ii. 312. *Speyer, grosse thurnschwal-*
Black-Martin, or Swift. *be. Kram.* 380. *Scopoli,*
Will. orn. 214. *No.* 251.
Rati syn. av. 72. *Br. Zool.* 97. *Arct. Zool.*
Randome. Zinn. 47. ii. 180.

THIS species is the largest of our swallows; but the weight is most disproportionably small to its extent of wing: the former being scarcely



any other swallows; its flight is more rapid, and that attended with a shrill scream. It rests by clinging against some wall, or other apt body; from whence *Klein* styles this species *Hirundo muraria*. It breeds under the eaves of houses, in steeples, and other lofty buildings; makes its nest of grasses and feathers, and lays only two eggs, of a white color.

It is entirely of a glossy dark sooty color, *Description* only the chin is marked with a white spot; but by being so constantly exposed to all weathers, the gloss of the plumage is lost before it retires. The feet are of a particular structure, all the toes standing forward; the lest consists of only one bone; the others of an equal number, viz. two each; in which they differ from those of all other birds.

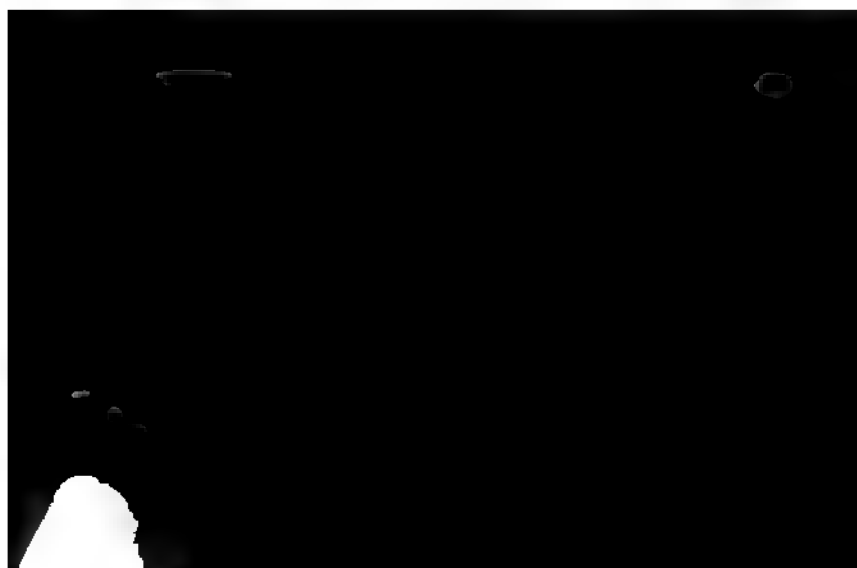
This appears in our country about fourteen days later than the sand martin; but differs greatly in the time of its departure, retiring invariably about the tenth of *August*, being the first of the genus that leaves us. I cannot trace them to their winter quarters; unless in one instance of a pair found adhering by their claws and in a torpid state, in *February* 1766, under the roof of *Longnor Chapel, Shropshire*:

on being brought to a fire, they revived and moved about the room.

Swifts appear about *Pavia* on the eighth of *April*, and depart towards the twenty-fifth of *July*; some remain as late as *September*.

The fabulous history of the *Manucodiata*, or bird of *Paradise*, is in the history of this species in great measure verified. It was believed to have no feet, to live upon the celestial dew, to float perpetually on the *Indian* air, and to perform all its functions in that element.

The **SWIFT** actually performs what has been in these enlightened times disproved of the former; except the small time it takes in sleeping, and what it devotes to incubation, every other action is done on the wing. The materials of its nest it collects either as they are carried about by the winds, or picks them



space with an easy steady motion. On a sudden they fall into each other's embraces, then drop precipitate with a loud shriek for numbers of yards. This is the critical conjuncture, and to be no more wondered at, than that insects (a familiar instance) should discharge the same duty in the same element.

These birds and swallows are inveterate enemies to hawks. The moment one appears, they attack him immediately: the swifts soon desist: but the swallows pursue and persecute those rapacious birds, till they have entirely driven them away.

Swifts delight in sultry weather, and seem thence to receive fresh spirits. They fly in those times in small parties with particular violence; and as they pass near steeples, towers, or any edifices where their mates perform the office of incubation, emit a loud scream, a sort of serenade, as Mr. *White* supposes, to their respective females.

To the curious monographies on the swallow tribe, of that worthy correspondent, I must acknowledge myself indebted for numbers of the remarks above-mentioned.

OF THE
DISAPPEARANCE OF SWALLOWS.

THERE are three opinions among naturalists concerning the manner the swallow tribe dispose of themselves after their disappearance from the countries in which they make their summer residence. *Herodotus* mentions one species that resides in *Egypt* the whole year: *Prosper Alpinus** asserts the same; and Mr. *Laten*, late governor of *Ceylon*, assured us that those of *Java* never remove. These excepted, every other known kind observe a periodical migration, or retreat. The swallows of the cold *Norway*,† and of *North America*,‡ of the distant *Kamtschatka*,§ of the temperate parts of



Europe, of Aleppo, and of the hot Jamaica,†* all agree in this one point.

In cold countries, a defect of insect food on the approach of winter, is a sufficient reason for these birds to quit them; but since the same cause probably does not subsist in the warm climates, recourse should be had to some other reason for their vanishing.

Of the three opinions, the first has the utmost appearance of probability; which is, that they remove nearer the sun, where they can find a continuance of their natural diet, and a temperature of air suiting their constitutions. That this is the case with some species of *European swallows*, has been proved beyond contradiction (as above cited) by *M. Adanson*. We often observe them collected in flocks innumerable on churches, on rocks, and on trees, previous to their departure hence; and *Mr. Collinson* proves their return here in perhaps equal numbers, by two curious relations of undoubted credit: the one communicated to him by *Mr. Wright*, master of a ship; the other by the late *Sir Charles Wager*, who both described

* *Russel Alep.* 70.

† *Phil. Trans.* No. 36.

(to the same purpose) what happened to each in their voyages. "Returning home, says Sir " *Charles*, in the spring of the year, as I came " into sounding in our channel, a great flock " of swallows came and settled on all my rig- " ging; every rope was covered; they hung " on one another like a swarm of bees; the " decks and carving were filled with them. " They seemed almost famished and spent, " and were only feathers and bones; but being " recruited with a night's rest, took their " flight in the morning."* This vast fatigue, proves that the journey must have been very great, considering the amazing swiftness of these birds: in all probability they had crossed the *Atlantic* ocean, and were returning from the shores of *Senegal*, or other parts of *Africa*; so that this account from that most able and



CLASS II. SWALLOWS.**589**

Crossed the <i>Atlantic</i> , April 1770.			Saw no Swallows.
Ditto	-	May 1772.	Ditto.
Ditto	-	July 1773.	Ditto.
Ditto	-	16 May 1775.	Lat. $20^{\circ} 20'$ N. Long. $29^{\circ} 23'$ W. from <i>St.</i> <i>Helena</i> . Saw a swal- low.
Ditto	-	30 June 1778.	Lat. $28^{\circ} 5'$ N. Long. $20^{\circ} 9'$ W. from <i>As-</i> <i>cension</i> . Saw four swallows.
Ditto	-	1 July 1778.	Lat. $25^{\circ} 37'$ N. Long. $20^{\circ} 23'$ W. Saw a swallow.
Ditto	-	2 July 1778.	Lat. $29^{\circ} 41'$ N. Long. $20^{\circ} 19'$ W. A swal- low about the ship.

Mr. *White*, on *Michaelmas* day, 1768, had the good fortune to have ocular proof of what may reasonably be supposed an actual migration of swallows. Travelling that morning very early between his house and the coast, at the beginning of his journey he was environed with a thick fog, but on a large wild heath the mist began to break, and discovered to him numberless swallows, clustered on the standing bushes, as if they had roosted there; as soon as the sun burst out, they were instantly on wing, and with an easy and placid flight proceeded

towards the sea. After this he saw no more flocks, only now and then a straggler.*

This rendezvous of swallows about the same time of year is very common on the willows, in the little isles in the *Thames*. They seem to assemble for the same purpose as those in *Hampshire*, notwithstanding no one yet has been eye-witness of their departure. On the 26th of *September* last, two gentlemen who happened to lie at *Maidenhead bridge*, furnished at least a proof of the multitudes there assembled: they went by torch-light to an adjacent isle, and in less than half an hour brought ashore fifty dozen; for they had nothing more to do than to draw the willow twigs through their hands, the birds never stirring till they were taken.

The northern naturalists will perhaps say,



plunging into their subaqueous winter quarters; but was that the case, they would never escape discovery in a river perpetually fished as the *Thames*; some of them must inevitably be brought up in the nets that harass that water.

The second notion has great antiquity on its side. *Aristotle** and *Pliny*† give, as their belief, that swallows do not remove very far from their summer habitation, but winter in the hollows of rocks, and during that time lose their feathers. The former part of their opinion has been adopted by several ingenious men; and of late, several proofs have been brought of some species, at lest, having been discovered in a torpid state. Mr. *Collinson*‡ favored us with the evidence of three gentlemen, eye-witnesses to numbers of sand-martins being drawn out of a cliff on the *Rhine*, in the month of *March*, 1762.¶ And the Honorable *Daines Barrington* communicated to us the following fact, on the authority of the late Lord *Bel-*

* *Hist. an.* 935.

† *Lib.* 10. c. 24.

‡ By letter, dated *June* 14, 1764.

¶ *Phil. Trans.* vol. liii. p. 101. art. 24.

haven, that numbers of swallows have been found in old dry walls, and in sandhills near his Lordship's seat in *East Lothian*; not once only, but from year to year; and that when they were exposed to the warmth of a fire, they revived. We have also heard of the same annual discoveries near *Morpeth* in *Northumberland*, but cannot speak of them with the same assurance as the two former: neither in the two last instances are we certain of the particular species.*

Other witnesses crowd on us to prove the residence of those birds in a torpid state during the severe season.

First, In the chalky cliffs of *Sussex*; as was seen on the fall of a great fragment some years ago.

Secondly, In a decayed hollow tree that



Lastly, The Reverend Mr. Conway, of *Sychton, Flintshire*, was so obliging as to communicate the following fact. A few years ago, on looking down an old lead mine in that county, he observed numbers of swallows clinging to the timbers of the shaft, seemingly asleep; and on flinging some gravel on them, they just moved, but never attempted to fly or change their place; this was between *All Saints* and *Christmas*.

These are doubtless the lurking places of the latter hatches, or of those young birds, who are incapable of distant migrations. There they continue insensible and rigid; but like flies may sometimes be reanimated by an unseasonable hot day in the midst of winter; for very near *Christmas* a few appeared on the moulding of a window of *Merton College, Oxford*, in a remarkably warm noon, which prematurely set their blood in motion, having the same effect as laying them before the fire at the same time of year. Others have been known to make this premature appearance, but as soon as the cold natural to the season returned, they withdrew again to their former retreats.

I shall conclude with one argument drawn from the very late hatches of two species.

On the twenty-third of *October, 1767*, a martin was seen in *Southwark*, flying in and out of its nest; and on the twenty-ninth of the same month, four or five swallows were observed hovering round and settling on the county hospital at *Oxford*. As these birds must have been of a late hatch, it is highly improbable that at so late a season of the year, they would attempt from one of our midland counties, a voyage, almost as far as the equator, to *Senegal* or *Goree*: we are therefore confirmed in our notion, that there is only a partial migration of these birds, and that the feeble late hatches conceal themselves in this country.

The above, are circumstances we cannot but assent to, though seemingly contradictory




in a torpid state, and not the other many species of soft billed birds, which likewise disappear about the same time? The following reasons may be assigned.

No birds are so much on the wing as swallows; none fly with such swiftness and rapidity; none are obliged to such sudden and various evolutions in their flight; none are at such pains to take their prey; and we may add, none exert their voice more incessantly: all these occasion a vast expence of strength, and of spirits, and may give such a texture to the blood, that other animals cannot experience, and so dispose, or we may say, necessitate, this tribe of birds, or a part of them, at least, to a repose more lasting than that of any others.

The third notion is, even at first sight, too amazing and unnatural to merit attention, if it was not that some of the learned men have been credulous enough to deliver, for fact, what has the strongest appearance of impossibility: we mean the relation of swallows passing the winter immersed under ice, at the bottom of lakes, or lodged beneath the water of the sea at the foot of the rocks. The first

who broached this opinion, was *Olaus Magnus*, Archbishop of *Upsal*, who very gravely informs us, that these birds are often found in clustered masses at the bottom of the northern lakes, mouth to mouth, wing to wing, foot to foot; and that they creep down the reeds in autumn, to their subaqueous retreats. That when old fishermen discover such a mass, they throw it into the water again; but when young inexperienced ones take it, they will, by thawing the birds at a fire, bring them indeed to the use of their wings, which will continue but a very short time, owing to a premature and forced revival.*

That the good Archbishop did not want credulity, in other instances, appears from this, that after having stocked the bottoms of the lakes with birds, he stores the clouds with mice, which sometimes fall in plentiful showers



credit to the submersion of swallows; and *Klein* patronises the doctrine strongly, giving the following history of their manner of retiring, which he received from some countrymen and others. They asserted, that sometimes the swallows assembled in numbers on a reed, till it broke and sunk with them to the bottom; and that their immersion was preluded by a dirge of a quarter of an hour's length; that others would unite in laying hold of a straw with their bills, and so plunge down in society; that others again would form a large mass, by clinging together with their feet, and so commit themselves to the deep.*

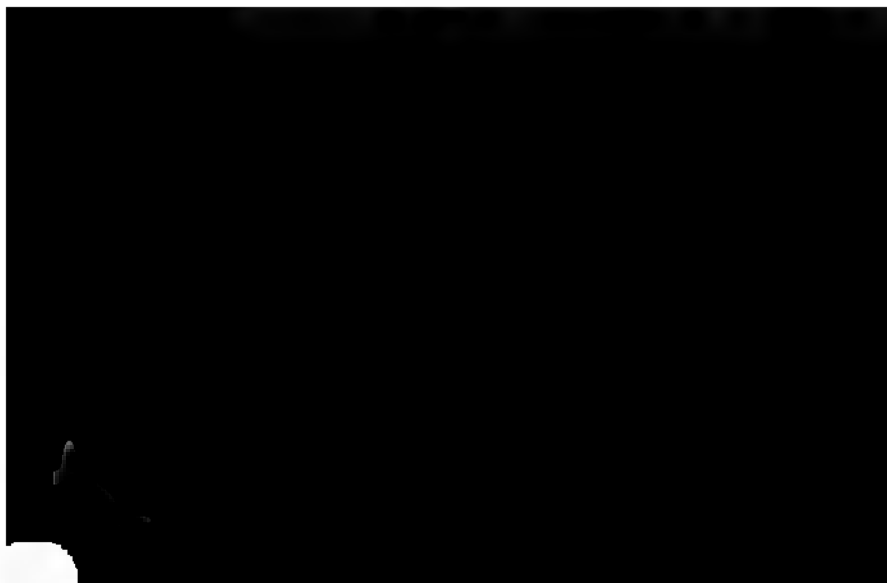
Such are the relations given by those who are fond of this opinion, and which, though delivered without exaggeration, must provoke a smile. They assign not the smallest reason to account for these birds being able to endure so long a submersion without being suffocated, or without decaying, in an element so unnatural to their delicate frame; when we know that the otter,† the corvorant, and the grebes,

* *Klein hist. av.* 205, 206. *Ekmarck migr. av. Amæn. acad.* iv. 589.

† Though entirely satisfied in our own mind of the im-

soon perish, if caught under ice, or entangled in nets: and it is well known that those animals will continue much longer under water than any others to whom nature hath denied that particular structure of heart necessary for a long residence beneath that element.

possibility of these relations; yet, desirous of strengthening our opinion with some better authority, we applied to that able anatomist *Mr. John Hunter*; who was so obliging to inform us, that he had dissected many swallows, but found nothing in them different from other birds as to the organs of respiration. That all those animals which he had dissected of the class that sleep during winter, such as lizards, frogs, &c. had a very different conformation as to those organs. That all these animals, he believes, do breathe in their torpid state; and, as far as his experience reaches, he knows they do: and that therefore he esteems it a very wild opinion, that terrestrial animals can remain any long time under water without drowning.



CLASS II. NOCTURNAL GOATSUCK. 599

GENUS XXX. GOAT-SUCKER.

BILL very short, bent at the end, bristles round the base.

NOSTRILS tubular, very prominent.

TAIL consisting of ten feathers, not forked.

- Caprimulgus Europæus.** C. niger cinereo fusco ferrugineo et albo varius, subtus albo-rufescens fasciis fuscis. *Lath. ind. orn.* 584. *id. Syn.* iv. 593. *id. Sup.* i. 194. volant. *Brisson av.* ii. 1. *Nocturnal* 470. *tab.* 44. *Hist. d'oïis.* vi. 512. *Pl. Enl.* 193. Covaterra. *Sinan.* 94. *Sco-* *poli, No.* 254. **Caprimulgus Europæus.** *Gm. Lin.* 1027.
- L'Effraye ou Fresaye.** *Be-* *lon av.* 343. **Natskrafa, Natskarra,** **Quallknarren.** *Faun. Succ.* *sp.* 274.
- Caprimulgus, Geissmelcher.** *Gesner av.* 241. **Hirundo cauda æquabili.** *II. caprimulga.* *Klein* *av.* 81.
- Calcobotto.** *Aldr. av.* i. 288. **Nat-Ravn, Nat-Skade, Af-** **Fern Owl, Goatsucker, Goat** **ten-bakke.** *Brun.* 293. **Owl.** *Wil. orn.* 107. Also, **Mucken stecker, Nach-** **Churn Owl.** *Raii syn. av.* **trabb.** *Kram.* 381. **26. Cat. Carol.** i. 8. **Br. Zool.** 97. *tab.* R. R. 1. **Dorhawk, accipiter Cantha-** **Arct. Zool.** ii. 136. **rophagus.** *Charlton ex.* 79. **Le Tette Chevre ou Crapaud**

KLEIN hath placed this bird in the swallow tribe, and styles it a swallow with an undi-

800 NOCTURNAL GOATSUCK. CLASS II.

vided tail. It has most of the characters of that genus; a very small bill, wide mouth, small legs. It is also a bird of passage; agrees in food with this genus, and in the manner of taking it: differs in the time of preying, flying only by night, so with some justice may be called a *nocturnal swallow*. It feeds on moths, gnats, dorrs or chaffers; from which *Charlton* calls it a *Dorr-hawk*, its food being entirely that species of beetle during the month of *July*, the period of that insect's* flight in this country.

This bird makes but a short stay with us: appears the latter end of *May*; and disappears in the northern parts of our island the latter end of *August*,† but in the southern stays above a month later. It inhabits all parts of *Great Britain*, from *Cornwall* to the county of *Ross*.



CLASS II. NOCTURNAL GOATSUCK. 601

the wheel bird. It begins its song most punctually on the close of day, sitting usually on a bare bough with the head lower than the tail, as expressed in the upper figure in the plate; the lower jaw quivering with the efforts. The noise is so very violent, as to give a sensible vibration to any little building it chances to alight on, and emit this species of note: the other is a sharp squeak, which it repeats often; this seems a note of love, as it is observed to reiterate it when in pursuit of the female among the trees. It lays its eggs on the bare ground; usually two: they are of a long form, of a whitish hue, prettily marked with reddish brown.

The weight of this bird is two ounces and a *Description:* half; its length ten inches and a half; the extent twenty-two. The bill is very short; the mouth vast; the irides hazel. The plumage a beautiful mixture of black, white, ash color, and ferruginous, disposed in lines, bars, and spots. The male is distinguished from the female by a great oval white spot near the end of the three first quill feathers, and another on the outmost feathers of the tail; the plumage is also more ferruginous. The legs are short,

602 NOCTURNAL GOATSUCK. CLASS II.

scaly, and feathered below the knee; the middle toe connected to those on each side by a small membrane, as far as the first joint; the claw of the middle toe thin, broad, serrated.

END OF THE FIRST VOLUME.



ARABIAN HORSE.





HIGHLAND BULL.



LANCASHIRE COW.



SHEEP.





GOAT.





WOLF.





HIGHLAND BULL.



LANCASHIRE COW.





SHEEP.



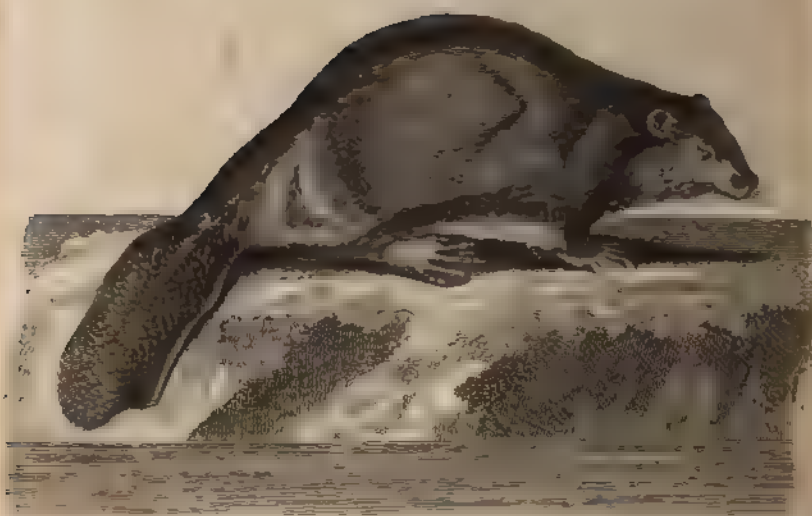
GOAT.



MUSIMON



BEAVER



WOLF





FITCHET



MARTIN



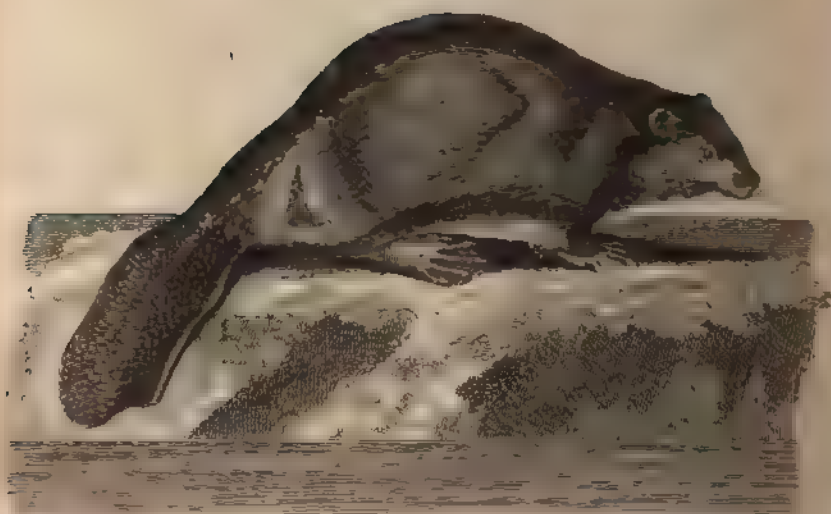




MUSIMON



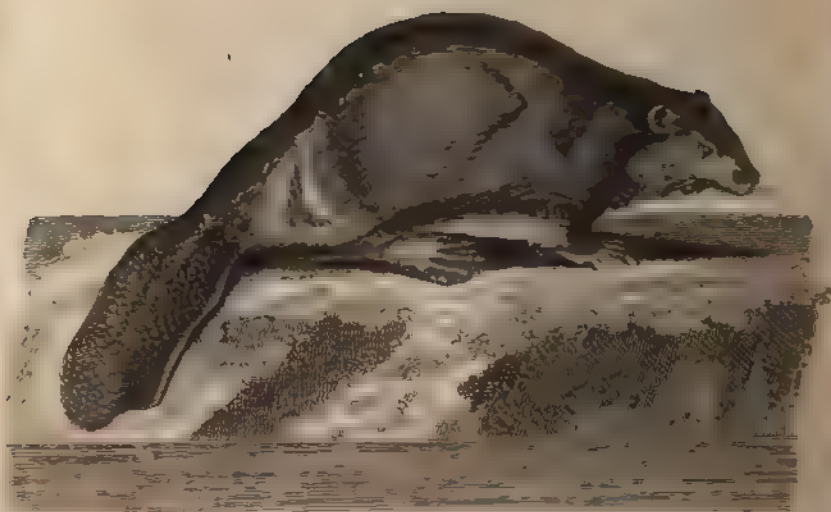
BEAVER



MUSIMON



BEAVER





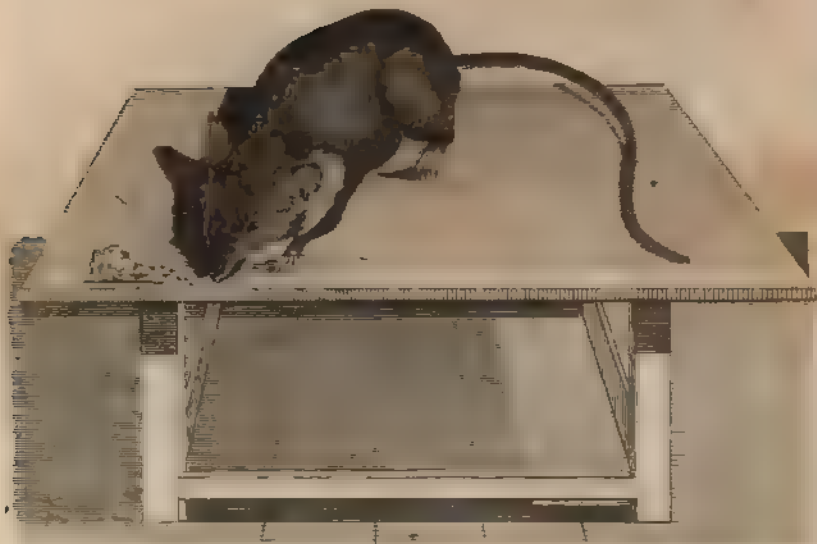
WEESEL.



STOAT.



COMMON MOUSE



WATER SHREW







Explanation of Technical Terms.



Cinereous Eagle





Pl. 21.

Gyr Falcon?





Perquine Falcon.



Pl. 26

Goshawk





Eagle Owl.





Pl 33.

Long-eared Owl





Pl 33

Long-eared Owl





Short Eared Owl.



Brown Owl.





Great Female Shrike



Pl. 37

Jackdaw



Carrion Crow





Pl 38

Red Legged Crow





Nüteracker





PL. 47

Golden Oriole M & F





Female Cuckoo



Wynneck. P. 312.





Middle & West Spotted Woodpeckers



Pl 44

European Nuthatch.

Common Kingfisher.



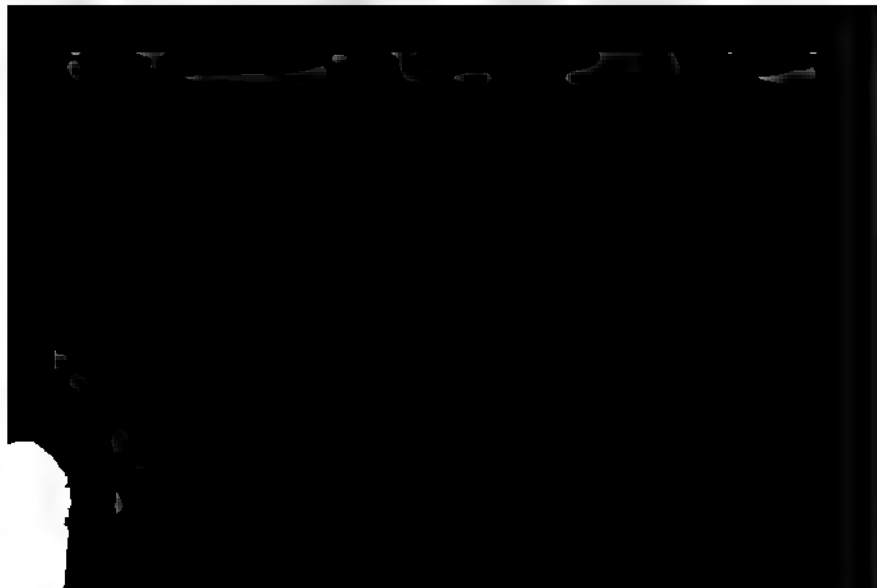


Pl 46.

Wood Grouse

(Male)





Pl. 48.

Black Grouse





Pl 53.

Penrith Quail?





754

M. & F. Blackbird.





Pl. 55.

Ravi Colored Ouzel.





Pl. 50.

Woven Chatterer.





Yellow Bunting.



Snow Bunting.





Yellow Bunting.



Snow Bunting.





Pl 60

C. M. & F. Sparrows.





Pl 60

W. & F. Sparrows.





Pl 61.

Three Sparrow.



Sedge Warbler.





Pl. 62.

Siskin M. G. F.



Twite. M. G. F.



Little Belton.

Pl. 62.





.63. Greater & lesser red headed. Finches.





Pl 6.

White Wagtail.



Yellow Wagtail?



Sky-Peck.

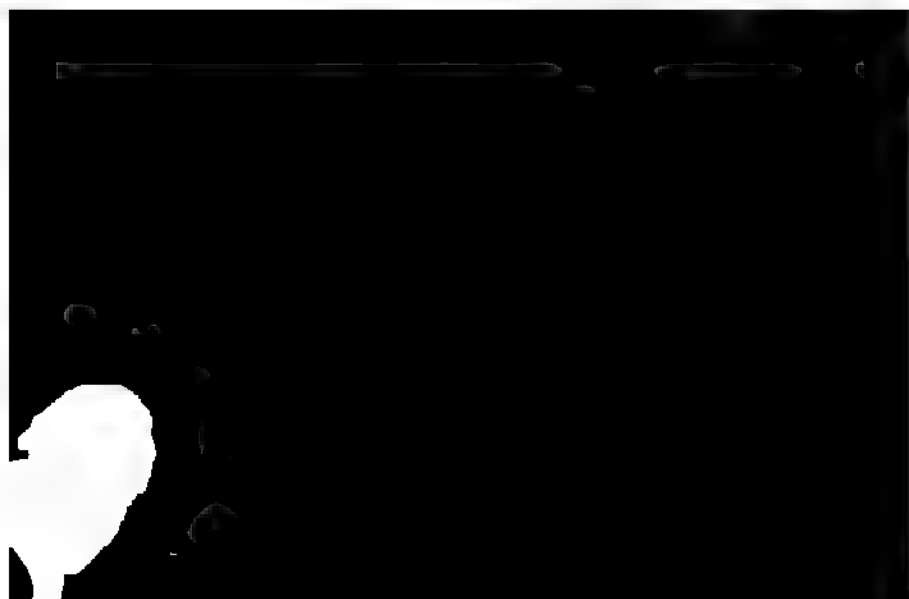
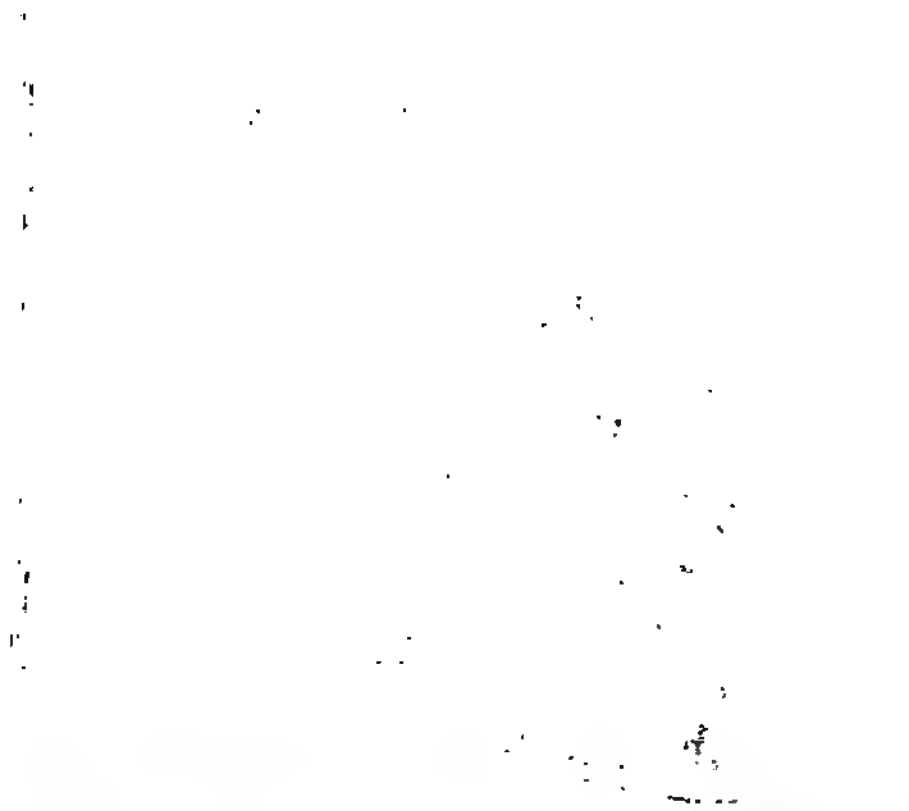




Pl. 65.

Dartford Warbler.





1 Great, 2 Blue Titmouse

Nov





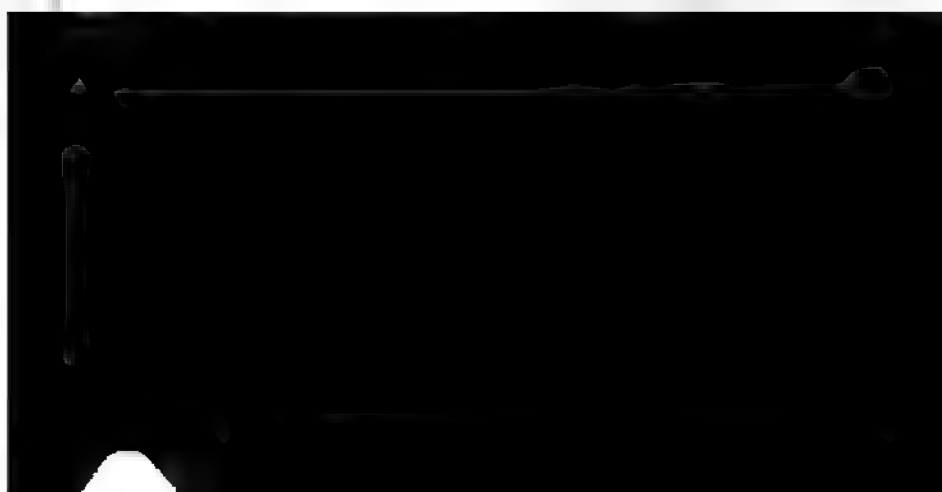
1707

Chimney Swallow.



(Swift.)





Mr. F. Goatsuckers.

Pl. 68.







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